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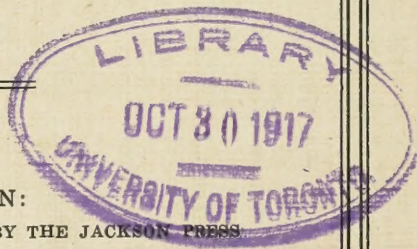
*Kingston, Ont.*  
QUEEN'S UNIVERSITY.

## Faculty of Education



## (ANNUAL) CALENDAR

Eleventh Session, 1917-1918



KINGSTON:

PRINTED FOR THE UNIVERSITY BY THE JACKSON PRESS

1917

## QUEEN'S UNIVERSITY.

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This Calendar is for the use of persons intending to take a University course in the *Faculty of Education*.

For *Arts* and *Theology* Calendars address THE REGISTRAR, Queen's University, Kingston, Ontario.

For *Medical* Calendar apply to THE SECRETARY, Medical School, Kingston, Ontario.

For *Science* Calendar (School of Mining), including all courses in Engineering, address THE SECRETARY of the School of Mining, Queen's University, Kingston, Ontario.

For lists of graduates, students, scholarships and prizes and pass lists in all Faculties, see complete Arts Calendar.

The Arts Calendar, Part II, contains the lists of graduates, undergraduates, winners of scholarships and prizes, and examination results in all Faculties. It may be had from THE REGISTRAR, price 25 cents, postage 12 cents extra.

The Examination Papers in all Faculties may be had bound for fifty cents, postage fifteen cents extra. Apply to THE REGISTRAR.



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CALENDAR FOR 1918

| JANUARY |    |    |    |    |    |    | FEBRUARY |    |    |    |    |    |    | MARCH |    |    |    |    |    |    | APRIL |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|-------|----|----|----|----|----|----|-------|----|----|----|----|----|----|
| S       | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  |
| ..      | .. | 1  | 2  | 3  | 4  | 5  | ..       | .. | .. | .. | .. | 1  | 2  | ..    | .. | .. | .. | .. | 1  | 2  | ..    | 1  | 2  | 3  | 4  | 5  | 6  |
| 6       | 7  | 8  | 9  | 10 | 11 | 12 | 3        | 4  | 5  | 6  | 7  | 8  | 9  | 3     | 4  | 5  | 6  | 7  | 8  | 9  | 7     | 8  | 9  | 10 | 11 | 12 | 13 |
| 13      | 14 | 15 | 16 | 17 | 18 | 19 | 10       | 11 | 12 | 13 | 14 | 15 | 16 | 10    | 11 | 12 | 13 | 14 | 15 | 16 | 14    | 15 | 16 | 17 | 18 | 19 | 20 |
| 20      | 21 | 22 | 23 | 24 | 25 | 26 | 17       | 18 | 19 | 20 | 21 | 22 | 23 | 17    | 18 | 19 | 20 | 21 | 22 | 23 | 21    | 22 | 23 | 24 | 25 | 26 | 27 |
| 27      | 28 | 29 | 30 | 31 | .. | .. | 24       | 25 | 26 | 27 | 28 | .. | .. | 24    | 25 | 26 | 27 | 28 | 29 | 30 | 28    | 29 | 30 | .. | .. | .. | .. |
| ..      | .. | .. | .. | .. | .. | .. | ..       | .. | .. | .. | .. | .. | .. | ..    | .. | .. | .. | .. | .. | .. | ..    | .. | .. | .. | .. | .. | .. |

| MAY |    |    |    |    |    |    | JUNE |    |    |    |    |    |    | JULY |    |    |    |    |    |    | AUGUST |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|------|----|----|----|----|----|----|------|----|----|----|----|----|----|--------|----|----|----|----|----|----|
| S   | M  | T  | W  | T  | F  | S  | S    | M  | T  | W  | T  | F  | S  | S    | M  | T  | W  | T  | F  | S  | S      | M  | T  | W  | T  | F  | S  |
| ..  | .. | .. | 1  | 2  | 3  | 4  | ..   | .. | .. | .. | .. | .. | .. | ..   | 1  | 2  | 3  | 4  | 5  | 6  | ..     | .. | .. | .. | 1  | 2  | 3  |
| 5   | 6  | 7  | 8  | 9  | 10 | 11 | 2    | 3  | 4  | 5  | 6  | 7  | 8  | 7    | 8  | 9  | 10 | 11 | 12 | 13 | 4      | 5  | 6  | 7  | 8  | 9  | 10 |
| 12  | 13 | 14 | 15 | 16 | 17 | 18 | 9    | 10 | 11 | 12 | 13 | 14 | 15 | 14   | 15 | 16 | 17 | 18 | 19 | 20 | 11     | 12 | 13 | 14 | 15 | 16 | 17 |
| 19  | 20 | 21 | 22 | 23 | 24 | 25 | 16   | 17 | 18 | 19 | 20 | 21 | 22 | 21   | 22 | 23 | 24 | 25 | 26 | 27 | 18     | 19 | 20 | 21 | 22 | 23 | 24 |
| 26  | 27 | 28 | 29 | 30 | 31 | .. | 23   | 24 | 25 | 26 | 27 | 28 | 29 | 28   | 29 | 30 | 31 | .. | .. | .. | 25     | 26 | 27 | 28 | 29 | 30 | 31 |
| ..  | .. | .. | .. | .. | .. | .. | ..   | .. | .. | .. | .. | .. | .. | ..   | .. | .. | .. | .. | .. | .. | ..     | .. | .. | .. | .. | .. | .. |

| SEPTEMBER |    |    |    |    |    |    | OCTOBER |    |    |    |    |    |    | NOVEMBER |    |    |    |    |    |    | DECEMBER |    |    |    |    |    |    |
|-----------|----|----|----|----|----|----|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|
| M         | T  | W  | T  | F  | S  | S  | S       | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  |
| 1         | 2  | 3  | 4  | 5  | 6  | 7  | ..      | .. | 1  | 2  | 3  | 4  | 5  | ..       | .. | .. | .. | .. | 1  | 2  | 1        | 2  | 3  | 4  | 5  | 6  | 7  |
| 8         | 9  | 10 | 11 | 12 | 13 | 14 | 6       | 7  | 8  | 9  | 10 | 11 | 12 | 3        | 4  | 5  | 6  | 7  | 8  | 9  | 8        | 9  | 10 | 11 | 12 | 13 | 14 |
| 15        | 16 | 17 | 18 | 19 | 20 | 21 | 13      | 14 | 15 | 16 | 17 | 18 | 19 | 10       | 11 | 12 | 13 | 14 | 15 | 16 | 15       | 16 | 17 | 18 | 19 | 20 | 21 |
| 22        | 23 | 24 | 25 | 26 | 27 | 28 | 20      | 21 | 22 | 23 | 24 | 25 | 26 | 17       | 18 | 19 | 20 | 21 | 22 | 23 | 22       | 23 | 24 | 25 | 26 | 27 | 28 |
| 29        | 30 | .. | .. | .. | .. | .. | 27      | 28 | 29 | 30 | 31 | .. | .. | 24       | 25 | 26 | 27 | 28 | 29 | 30 | 29       | 30 | 31 | .. | .. | .. | .. |



## FACULTY OF EDUCATION.

---

Principal: VERY REV. D. M. GORDON, D.D., LL.D., C.M.G.

Dean: H. T. J. COLEMAN, B.A., Ph.D.

Secretary: W. E. MACPHERSON, B.A., LL.B.

Registrar and Treasurer: GEO. Y. CHOWN, B.A.

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### OFFICERS OF INSTRUCTION.

Session 1917-18.

|  |                    |
|--|--------------------|
| WM. G. ANDERSON, B.A.,<br><i>Lecturer in Methods in English.</i>   | 343 Albert St.     |
| EDNA BOOTH,<br><i>Lecturer in Household Science.</i>   | 159 Stuart St.     |
| CORA T. CASSELMAN, B.A.<br><i>Lecturer in Methods in History.</i>  | 44 O'Kill St.      |
| R. M. CHASE, B.A.,<br><i>Lecturer in Music.</i>  | 252 Albert St.     |
| H. T. J. COLEMAN, B.A., Ph.D.,<br><i>Professor of the Science of Education.</i>  | Union St. W.       |
| AUGUSTUS F. HATCH, B.A.,<br><i>Lecturer in Manual Training.</i>  | 90 Frontenac St.   |
| R. KEITH HICKS, M.A.<br><i>Lecturer in French.</i>   | 44 Collingwood St. |
| A. P. KNIGHT, M.A., M.D., F.R.S.C.,<br><i>Lecturer in Hygiene.</i>   | Alice St.          |
| W. T. MACCLEMENT, M.A., D.Sc.,<br><i>Lecturer in Nature Study.</i>   | University Grounds |
| W. E. MACPHERSON, B.A., LL.B.,<br><i>Professor of the History of Education and Lecturer<br/>in Methods in History and Geography.</i> | 4 College St.      |
| G. S. OTTO, B.A.<br><i>Lecturer in Methods in Modern Languages.</i>  |                    |
| G. A. PALMER,<br><i>Lecturer in Physical Training.</i>   | 32 Frontenac St    |

W. J. SAUNDERS, M.A., M.S. 124 Beverley St.  
*Lecturer in Methods in Science.*

W. M. SHURTLEFF, B.A., 118 Victoria St.  
*Lecturer in Art and in Commercial Work.*

G. R. SMITH, B.A.,  
*Lecturer in Methods in Mathematics.*

E. O. SLITER, M.A., 320 Alfred St.  
*Lecturer in Methods in Classics and Director of Practice Teaching in the Collegiate Institute.*

J. RUSSELL STUART, 75 Alfred St.  
*Lecturer in Elementary Education and Director of Practice Teaching in Victoria School.*

Members of the Staff of the Kingston Collegiate Institute who  
 act as Critic Teachers.

Hattie L. Chown .....479 Princess St.  
 Florence M. Elliott, B.A. ....94 Barrie St.  
 J. W. Fraser, B.A. ....13 Mack St.  
 W. P. Hedley, B.A. ....300 University Ave  
 Elizabeth Henstridge, M.A. ....31 Pembroke St.  
 J. W. Kelly, B.A. ....181 Johnston St.

Members of the Staff of Victoria School who act as Critic  
 Teachers.

J. G. Ettinger, B.A. ....437 King St. W.  
 Emma Abrams . ....30 Aberdeen St.  
 Isabel Bureau . ....33 Union St.  
 Hattie Conley . ....30 Aberdeen St.  
 Sarah E. Connor .....354 Brock St.  
 Florence Hentig . ....558 Princess St.  
 Elizabeth Hoppin . ....276 Wellington St.  
 Grace Laturney .....105 Frontenac St.  
 Nellie Spooner, B.A. ....69 Colborne St.



## ACADEMIC YEAR.

1917

Sept. 26. Classes in Education open at 10 a.m.

Dec. 20. Christmas holidays begin, at 5 p.m.

1918

Jan. 8. Classes reopen.

Feb. 13. Ash Wednesday—a holiday.

Mar. 28. Easter Holidays begin at 12 m.

Apr. 9. Classes resume after Easter vacation, at 9 a.m..

June 11. Final Examinations in Education begin.

## GENERAL INFORMATION.

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The eleventh session of the Faculty of Education in Queen's University will open September 26th, 1917, and close June 21, 1918.

The Faculty of Education is the University's professional school of education. It trains candidates for diplomas in Education, and in particular for Provincial certificates as First-class Public School Teachers, High School Assistants and Specialists in Classics, English and History, Moderns and History, French and German, Mathematics, and Science. It offers courses and conducts examinations for degrees in Pedagogy.

All classes except such as are directly practical are held in the Arts building of the University, and every opportunity is given to the students to share to the full in all phases of University life. The Victoria Public School and the Kingston Collegiate Institute, situated within one minute's walk from each other, and a block from the University, are used by the Faculty as model schools for observation and practice.

Application for admission to the Faculty should be made to the Secretary of the Faculty of Education, Queen's University, Kingston, before the commencement of the session, and applications for examinations before April 1st. All fees should be paid to the Registrar of the University.

## EXPENSES OF COURSE.

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The following statement of expenses (taken from the Arts Calendar) is based on information obtained from students who have kept an account of their expenditures. The estimates do not include personal expenses.

*For a Session (October to May).*

|                                  |       |    |       |
|----------------------------------|-------|----|-------|
| Board, lodging and laundry ..... | \$130 | to | \$180 |
| Books, stationery, etc.....      | 15    | to | 25    |
| Fees . . . . .                   | 25    | "  | 25    |
|                                  | <hr/> |    |       |
|                                  | \$170 |    | \$230 |



The expenses for the longer session in Education will of course be proportionately greater as far as board, lodging, etc., are concerned.

The average student pays for table-board from \$3.25 to \$3.75 a week; and for room from \$1.25 to \$2.00 a week. A few pay as little as \$4.00 for board and room; others pay \$6.00 or more. Anyone, however, may count on finding satisfactory board and lodging at from \$5.00 to \$5.25 a week.

### BOARDING HOUSES.

Lists of Boarding Houses may be obtained from the Registrar, or from the Secretary of the Faculty. Requests for these should state whether they are required for men or women students.

Men and women students are not permitted to lodge in the same houses unless they are members of the same family or receive special permission from the Senate. A list of approved houses where suitable accommodation is provided for women students will be furnished on application to the Registrar or to the Secretary of the Faculty.

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### DEAN OF WOMEN.

The University has appointed Mrs. W. E. McNeill, M.A., as Dean of Women. Her duties are to assist women students in planning their courses, to give them information and help of various kinds, and to advise them in all matters in which they feel the need of counsel.

Mrs. McNeill may be reached by correspondence addressed to her at the University; and during term time she may be consulted at her office in Carruthers Hall.

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### ADMISSION.

A candidate for admission to the Faculty of Education shall make application on a form to be obtained from the Secretary of the Faculty and shall submit with this application:

1. A certificate from a competent authority that he will be at least 19 years of age before the first of October.

2. A certificate from a clergyman or other competent authority that he is of good moral character.

3. A certificate in detail from a physician that he is physically fit for the work of a teacher and especially that he is free from serious pulmonary affection and from serious defects in eyesight and hearing.

4. One of the following:

(a) His certificate of graduation in Arts after a regular course from the Registrar of any University in the British Dominions, said certificate to be subject to the approval of the Minister of Education.

(b) His certificate of graduation in the Science of Agriculture, B.Sc. (Agr.), after a regular university course approved by the Minister of Education.

(c) His full certificate for Entrance into the Faculty of Education.

(d) His Senior Teacher's certificate.

Note 1.—No one will be granted a teacher's certificate by the Department of Education who does not agree to teach thereon in the schools of the Ontario provincial system for at least the first year of his subsequent teaching experience. A violation of this agreement will lead to a cancelling of the teacher's certificate.

Note 2.—No one will be granted a teacher's certificate unless or until he is a British citizen.



## COURSES

### I.

The following Courses are offered:

I. Courses for Interim First Class Grade B, Ordinary High School, and High School Specialists' certificates, for Elementary certificates in Physical Culture and for First Class Grade A certificates.

II. Courses for the degrees of Bachelor of Pedagogy and Doctor of Pedagogy.

COURSES FOR INTERIM FIRST CLASS GRADE A AND GRADE B, ORDINARY HIGH SCHOOL AND HIGH SCHOOL SPECIALISTS' CERTIFICATES, AND ELEMENTARY CERTIFICATES IN PHYSICAL CULTURE.

### SESSIONS

1. (1) (a) Enrolment in classes of the regular session will begin Tuesday, September 25, at 10 a.m., and the lectures will begin September 26, at 10 a.m. The Autumn Term will end Friday, December 21st, at 12 noon, and the Easter Term begin Tuesday, January 8, at 9 a.m. The Easter vacation will begin Thursday, March 28, at 12 noon and end at 9 a.m., Tuesday, April 9. The Regular Session will end June 21.

(b) Subject to the approval of the Minister of Education candidates for First Class Grade B or Ordinary High School certificates who are required to re-attend may enter in January and remain until the close of the session in June.

(2) The first Supplementary session will be held in the Autumn term of 1918.

### DUTIES OF STUDENTS

2. (1) All students are required to review, before the session opens, the High School courses which are the academic bases of the professional courses in the Faculty of Education.

(2) Regular attendance is indispensable, except for such students as are exempt from attendance under the regulations of the Department of Education, and for such other students of the regular session as are experienced teachers and are permitted by the Dean to act, after Christmas, for not more than a total of one month, as substitute teachers in those schools of the Provincial system of Ontario for which their course of training is intended to fit them. A return of the attendance of each student will be made to the Minister of Education at the close of the session.

(3) (a) Students whose class-work shows them to be unduly deficient in scholarship or whose conduct or progress is unsatisfactory, may be dismissed from attendance by the Dean at any time during the session. The names of students found during the first term to be deficient in scholarship will be reported to the Dean before the Christmas vacation.

(b) On the Dean's report to the Minister of Education as to the physical unfitness of a student for training for a Provincial certificate as a teacher, the Minister may require a special medical examination of such student, and, as a result thereof, may direct that his registration for such training be cancelled.

### FEEES

3. (1) (a) The annual fee for the Course for Interim First Class Grade B or Ordinary High School certificates, which includes the library, gymnasium, and examination fees, will be \$25.00. The fee for the examination in the Course when the examination is not taken during the regular session, or when it is taken by students not in attendance, will be \$20.00, or \$5.00 for each of Parts I and III and \$10.00 for Part II, i.e., \$5.00 for Group A and \$5.00 for Group B. The fee for the University diploma will be \$2.00.

(b) When an Interim High School Specialist Course is taken concurrently with the Course for an Interim Ordinary High School certificate, or when an Interim High School Specialist examination is taken concurrently with the examination for an Interim Ordinary High School certificate, there is no additional fee. The fee for a specialist course or examination, one or both, taken apart from the course or examination for an Interim Ordinary High School certificate, will be \$5.00 per course or per examination paper, as the case may be.

(c) As the course for the Elementary certificate in Physical Culture is an obligatory part of the course for Interim Ordinary High School certificates and for one of the courses for Interim First Class Grade A certificates, as the case may be, an additional fee is not required.

(2) All students exempt from attendance who are duly registered in the Course for Interim First Class Grade B or Ordinary High School certificates, and who pay a fee of \$10.00 (which will not in this case include the fee for examination) may receive from the staff of the Faculty of Education such guidance in these courses as may be reasonably expected by such students.

(3) The fees for the Course for a First Class Grade A certificate will be published before the close of the Regular session of 1917-18.



## STUDENT SOCIETIES

4. Various religious, athletic, literary, and dramatic associations are formed each session. For professional improvement all students are expected to share in the activities of these associations.

## APPEALS

5. The answer papers of all unsuccessful candidates are re-read and the results reconsidered before a decision to reject is reached. Despite this fact, any unsuccessful candidate may have his case considered a third time if within two weeks after the announcement of the results he lodges with the Minister of Education his appeal with a statement of the grounds upon which it is based and with a fee of \$2.00. If made within the two weeks following the fee will be \$5.00, and no appeal will be entertained thereafter. The fee will be refunded if the appeal is sustained.

## A.

### COURSE FOR INTERIM FIRST CLASS GRADE B CERTIFICATES

#### PURPOSE

6. The purpose of the Course for Interim First Class Grade B certificates is to prepare candidates therefor in the theory and art of organizing, governing, and instructing the pupils of the Public and Separate Schools and of Grade C Continuation Schools.

#### CONDITIONS OF ADMISSION

7. (1) Except as provided in (2) below, an applicant for admission to the Course for an Interim First Class Grade B certificate should make application not later than September 25, to the Secretary of the Faculty of Education on a form to be obtained from the Secretary, and should submit with this application, on official forms also to be supplied by the Secretary:

(a) A certificate from the Deputy Registrar-General of Births, Parliament Buildings, Toronto, or an affidavit by one of the parents or other relative, or other person cognizant of the fact, that the applicant will be at least 19 years of age before the first of October of the year in which the application is made.

(b) A certificate from a clergyman or other competent authority that he is of good moral character.

(c) A certificate from a physician that he is physically able for the work of a teacher, and, especially, that he is free from serious pulmonary affection and from seriously defective eyesight and hearing.

(d) An agreement, if successful in obtaining a teacher's certificate, to teach thereon in the Provincial Schools of Ontario, for at least the first year of his subsequent teaching experience. A violation of this agreement will render the certificate invalid.

(e) A certificate from a competent authority that he is a British subject.

(f) One of the following:

(i) His certificate of graduation as Bachelor or Master of Arts from a British university, after a regular university course approved by the Minister of Education as to standard and as to the content of the undergraduate course.

(ii) His certificate of graduation as Bachelor of Science in Agriculture from a British university, after a regular university course approved by the Minister of Education as to standard and as to the content of the undergraduate course.

(iii) His Senior Teachers' certificate.

(iv) His full certificate for admission into the Faculty of Education, including certificate of Lower School qualifications.

(2) An applicant for admission to this course who is not a candidate for the certificate of the Ontario Department of Education must comply with such conditions of admission as the Council of the Faculty of Education may determine.

(3) Applications, by students not in attendance, for admission to the examinations should be made, at least one month before the examinations begin, to the Secretary of the Faculty of Education, Queen's University, on an official form to be obtained from the Secretary.

## TEXT-BOOKS

The text-books for the academic review are those prescribed for the Lower and Middle Schools of the High Schools of Ontario in each subject of the student's course.

For observation and practice-teaching students should supply themselves with copies of text-books authorized in the Public Schools and the Lower Schools of the High Schools of Ontario. They should also supply themselves with the professional text-books whose titles are marked with asterisks in the lists given below under each subject of the course. Reference books, source books, and encyclopaedias to supplement these text-books are free of access in the library of the Faculty of Education and in the University Library.



## PROGRAMME OF STUDIES

9. The course of training consists of three Parts:

### Part I:

The History of Education, the Science of Education, School Organization and Management.

### Part II, Group A:

Special Methods in the following subjects of Forms I-V and of Forms I-IV, in particular, of the Public Schools, and of Grade C Continuation Schools: Literature, Grammar, Composition; Arithmetic, Algebra, Geometry; History; Geography; Latin; Elementary Science; Optional: French, German, Greek.

**Note.**—Until the arrangement of the subjects for admission to the Faculties of Education is altered, an Interim First Class Grade B Certificate may be obtained without any of the optional languages; but, as French and German are subjects of Form V of the Public and Separate Schools, with Greek in addition in the case of the Grade C Continuation Schools, students who have taken one or more of these languages at the Faculty Entrance Examination should take at least one of them in their professional course, in order that they may be qualified to teach it when required and that their competency therefor may be recorded in their certificates.

### Group B:

Writing and Book-keeping; Reading; Spelling; Art; Vocal Music; Physical Culture and Hygiene; Nature Study; Manual Training; Household Science (for women).

### Part III:

Observation and practice-teaching in the kindergarten-primary and Forms I-IV of urban Public Schools and the Lower School of the High Schools, with observation in the Kindergarten, Form V, ungraded rural Public Schools and in the Middle School of the High Schools.

## MODIFICATIONS OF COURSE

10. (1) Subject to the approval of the Minister of Education, the Faculty of Education may make such modifications of the scheme of subjects in Part II, Group A, as will suit the conditions of candidates for Provincial certificates who obtained their academic standing in courses which did not include Latin.

(2) Students who hold Provincial professional certificates in Physical Culture, Art, Household Science, Manual Training, Vocal Music, and the Commercial subjects, may be exempted from examinations in said subject or subjects, but must review in class the special methods of the course concerned.

(3) Students who have passed in the Manual Training, Household Science, or Book-keeping and Writing of the Lower School or in the Art of the Middle School may be exempted from the extension work of the

course or courses concerned, but must complete to the satisfaction of the instructor or instructors therein, the methodology of the subject or subjects and the concurrent academic work.

(4) In the oral examinations and exercises in Vocal Music the instructor, will give due consideration to the claims of the candidates who report themselves as incapable of learning to sing, if such claims are presented to the instructor at the beginning of the session. In no case, however, shall such consideration involve exemption from attendance at the classes or from the written examinations in the subject. If any candidate is unable to teach music that fact will be stated on his certificate.

### ORGANIZATION OF COURSE

11. (1) The following introductory work will be taken up at the beginning of the session:

(a) About 20 lectures upon the topics *Introduction* and *General Method* in the course in the Science of Education. (See chapters I-III, IV-XVIII of the Ontario Normal School Manual, *The Science of Education*).

(b) A discussion of the functional value of each of the courses defined herein.

(c) Supervised observation and practice-teaching lessons, about ten each, in the different grades or forms of the Public Schools and Lower Schools of the High Schools.

(2) The instruction in the special methodology of the subjects of Part II, Groups A and B, will be accompanied by a review of such subjects from the academic standpoint. This review will be limited to such portions of the course in each subject in Group A as may be necessary to determine the scholarship of the students and to illustrate the methods of instruction in that subject, dealing in particular with those parts of the course that are difficult of presentation. To a review of the subjects of Group B will be added such an extension of the work beyond the limits set by the curricula of the Public Schools as time will permit.

(3) In the order and the grouping of the courses, due regard will be had to the character of each subject, to its correlations with other subjects, and to the logical development of the courses.

(4) So far as conditions permit, the programme of instruction will be organized on the basis of intensive study of a few subjects at a time.

(5) (a) The programme of instruction for each class, exclusive of observation and practice-teaching, will require the equivalent of 22

lectures of 45 minutes each weekly during the session. These lectures will be distributed among the various courses approximately as follows: History of Education 25, Science of Education 60, School Organization and Management 50, English (including Spelling, Literature, Grammar, and Composition, 140; Mathematics (including Arithmetic, Algebra, and Geometry) 70; History 20; Nature Study 30; Elementary Science 20; Geography 25, Latin 25, Greek or French or German 20; Music 30; Manual Training 30; Household Science 30, Reading 35, Art 45, Book-keeping and writing 15; Physical Culture and Hygiene 45.

(b) (i) The Courses in the Science of Education and School Management and Organization will begin at the opening of the session and continue until May 1; the course in the History of Education will begin in January and continue until May 1.

(ii) The Courses in English, Mathematics, Music, and Physical Culture and Hygiene will continue throughout the session; those in the other subjects will be taken, so far as practicable, in correlation with the observation and practice-teaching, and will continue until completed.

(iii) The course in Spelling will include not more than five lectures and will be completed early in the session. The course in Book-keeping and Writing, which will be supplemented by practical exercises, will include not more than 15 lectures.

(c) The observation work will begin in the third week of the session and the practice teaching in the fifth week. Exclusive of the introductory work, the programme of instruction will include for each student at least 40 observation lessons and 20 practice-teaching lessons. These numbers will be increased to meet the needs of individual students.

## OBSERVATION AND PRACTICE-TEACHING

12. (1) The Introductory Course defined above will be followed by systematic observation and practice-teaching under the general supervision of the instructors in the Faculty of Education.

(2) The students will be divided into suitable groups and the work of observation and practice-teaching will be taken up systematically per time-table arranged from time to time. So far as practicable that group to which the student belongs will be present at the discussions on his observation and practice-teaching lessons.

(3) (a) The observation and practice-teaching lessons for each student will be arranged to represent, as far as practicable, the work of the Public Schools in all subjects and grades, including the kindergarten-primary, and the work of the Lower Schools of the High Schools. There will also be supervised observation in the kindergarten and in the Lower School of the High Schools, and observation in ungraded rural Public Schools and in Grade C Continuation Schools.



(b) Continuous practice-teaching for several periods toward the end of the course will be required, the student being wholly responsible for the management of the class.

(4) Students will be notified of the subject and the scope of the observation lesson, and should prepare the lesson beforehand. After observing the lesson, they will discuss it with the teacher concerned.

(5) Students will be notified of the subject and scope of the practice-teaching lesson by the teacher concerned, and will prepare a plan of each practice-teaching lesson for submission to the teacher.

(6) (a) Model lessons will be taught by the teachers of the practice schools in accordance with the regular programme of the said schools.

(b) The instructors of the Faculty of Education will develop the details of their subject in their teaching order, and after each suitable step, will also themselves teach model lessons. At these lessons the teacher in charge of the class will be present.

(7) (a) The necessary applications of the Science of Education and of special methodology will be made systematically in connection with the observation lessons and the practice-teaching; so that the course may be taken up in terms of the child's mind and growth. From time to time the instructor in the Science of Education will himself illustrate by actual teaching the principles he has discussed in class.

(b) As far as practicable, the instructors in the Faculty of Education will be present at the observation lessons and practice-teaching, and will share jointly with the teachers of the practice schools in the criticism and valuation of the work of the students.

## EXAMINATIONS

### SUBJECTS AND STANDARDS

13. (1) For examination purposes the courses in Parts I, II, and III, are classified into the following subjects:

Part I: The History of Education, the Science of Education, and School Organization and Management.

Part II, Group A: Literature; Grammar; Composition; Arithmetic; Algebra and Geometry; History; Geography; Latin; Elementary Science; Greek; French; German.

Part II, Group B: Reading; Spelling; Art; Vocal Music; Physical Culture and Hygiene; Nature Study; Manual Training; Household Science.

Part III: Observation; practice-teaching.

(2) (a) Subject to the provisions indicated herein the final standing of students in attendance will be determined by the result of the records of the observation and practice-teaching of Part III and by the

combined results of the sessional records and the records of the final examinations in the subjects of Part I, and of Groups A and B, Part II.

(b) The sessional records represent oral and written exercises and tests, practical work, practice in valuing the answer-papers of pupils, and such term examinations as the staff may prescribe

(c) There will be final examinations in the subjects of all the Parts, as follows: in Part I, in May; in Part II, Group A, in June; in Part II, Group B, on the completion of the course concerned.

(d) (i) With the exception indicated below the maximum marks assigned to each subject in Parts I and II will be 100. In the subjects of Part I and of Part II, Group A, a maximum of 40% of the marks may be assigned to the sessional records, and 60% to the final written examination. In the subjects of Part II, Group B, a maximum of 50% of the marks may be assigned to the sessional records and 50% to the final written examination.

(ii) The maximum marks assigned to the History of Education will be 50, of which 20 will be assigned to the sessional records and 30 to the final written examination.

(iii) There will be no final examination in Writing and Book-keeping. Each student must complete satisfactorily his practical work and tests in these subjects throughout the session, including a short set in Single Entry with the accompanying business forms.

(e) A maximum of 800 marks will be assigned to practice-teaching and of 400 to observation. The standing of students in observation and in practice-teaching will be based upon their record in the lessons following those which form part of the Introductory Courses.

## CERTIFICATES

14. (1) A student who obtains 40% of the marks in each subject and 60% of the aggregate of the marks in each of Parts I, II, Group A, and II, Group B, and in each of the divisions of Part III, may, on the recommendation of the examiners, be awarded by the Minister of Education an Interim First Class Grade B certificate.

(2) A student who fails to obtain a First Class Grade B certificate, but who passes in Part III and makes 35% of the marks in each subject and 55% of the aggregate of the marks in each of Parts I, II, Group A, and II, Group B, may, on the recommendation of the examiners, be awarded by the Minister of Education, an Interim Second Class certificate and be exempted during a period of two years from further attendance at a Faculty of Education in order to obtain a First Class Grade B certificate.

(3) All other students who have failed to obtain the necessary final standing will be required to attend another session, beginning after the Christmas vacation.

(4) (a) (i) Candidates who are exempted from attendance at a Faculty of Education as provided in (2) above, may take, and must complete within two years, the examination or examinations in the Part or Parts in which they failed.

(ii) Candidates who hold Permanent Second Class certificates with the academic standing required for admission to the Faculties of Education and who submit certificates of at least three years' successful experience from the Public or Separate School inspectors under whom they have taught during that period, will be exempted from attendance, but will take the final examinations prescribed for Parts I and II, and must also satisfy the examiners by practical tests of their ability to teach the subjects of Form V of the Public Schools and of Grade C continuation Schools.

(iii) Candidates who failed at an examination under former regulations and who were exempted from subsequent attendance at a Faculty of Education, will take, not later than a date to be determined in each case by the Minister of Education, the final examinations prescribed for Parts I and II, but their standing will be determined in the Parts as constituted under the regulations in force when they first wrote.

(iv) Candidates who have been exempted by the Minister of Education from attendance at a Faculty of Education on account of equivalent training in other Provinces or countries and who are required to write on the final examinations of the Faculties of Education, will take all final examinations in the subjects of Part I and II, and will also satisfy the examiners by teaching and other tests that they are competent for the work in Part II.

(b) (i) The pass standard for all candidates exempt from attendance will be 40% of the marks for each subject and 60% of the aggregate of marks in each of Parts I, II, Group A, and II, Group B, and the teaching of Part III.

(ii) No allowance will be made for sessional work in the case of candidates not in attendance.

(iii) The final examinations in Reading, Physical Culture, and Vocal Music for students exempt from attendance will include written tests, and also practical tests, to which, in each case, 50% of the marks for the final examination will be assigned. In Writing and Book-keeping students exempt from attendance must complete satisfactorily such tests as the examiners may prescribe.

(c) (i) For candidates exempt from attendance who so elect, the examination in Part II, Group B, will be a special one to be taken at the close of the session in June.

(ii) Candidates exempt from attendance may take their written examinations in Parts I and II at Kingston or at such local centres and



under such conditions as may be determined by the Senate. They must, however, take their practical tests in Reading, Music, and Physical Culture and in Teaching at Kingston.

### DIPLOMAS.

15. Successful candidates who are awarded Interim First Class Grade B certificates by the Minister of Education, and such other successful candidates as were admitted to the course under Section 7 (2) may be awarded University diplomas.

### B.

### COURSE FOR INTERIM ORDINARY HIGH SCHOOL CERTIFICATES

#### PURPOSE.

16. The purpose of the Course for Interim Ordinary High School certificates is to prepare candidates therefor in the theory and art of organizing, governing, and instructing pupils in Continuation Schools and High Schools.

#### CONDITIONS OF ADMISSION

17. (1) With the exceptions defined in (2) below, the conditions of admission to the course for Interim Ordinary High School certificates are the same as those for admission to the course for an Interim First Class Grade B certificate.

(2) The applicant for admission to the course must submit one of the following:

(a) His certificate of graduation as a Bachelor or Master of Arts from a British university after a regular university course approved of by the Minister of Education as to standard and as to content of the undergraduate courses.

(b) His certificate of graduation as a Bachelor of Science in Agriculture (B.Sc. Agr.) from a British university, after a regular university course approved by the Minister of Education as to standard and as to the content of the undergraduate courses.

#### TEXT-BOOKS.

18. The text-books for the academic review are those prescribed for the Lower and Middle Schools of the High Schools of Ontario in each subject of the student's course.

For observation and practice-teaching students should supply themselves with copies of the text-books authorized for use in the above named grades of schools. They should also supply themselves with the professional text-books whose titles are marked by asterisks in the lists given below each subject. In certain cases, especially in the courses in methods, the instructor may require additional or alternative text-books. Reference books, source books, and encyclopaedias to supplement these text-books are free of access in the library of the Faculty of Education and the University Library.

### PROGRAMME OF STUDIES

19. The course of training for Interim Ordinary High School certificates consists of three Parts.

Part I: The History of Education, the Science of Education, School Organization and Management.

Part II, Group A: Grammar, Literature, Composition; Arithmetic, Algebra, Geometry; History; Geography; Latin; and (*a*) any two of French, German, Greek; or (*b*) Physics, Chemistry, and Biology.

Part II, Group B: Writing and Book-keeping; Reading; Art; Physical Culture and Hygiene.

Part III: Observation and practice-teaching in the Lower and Middle Schools of the High Schools, with observation in the Upper School of the High Schools and in Continuation Schools, Grades B and C.

### MODIFICATIONS OF COURSES

20. (1) Subject to the approval of the Minister of Education, the Faculty of Education may make such modifications of the scheme of options in Part II, Group A, as will suit the conditions of candidates for Provincial certificates who obtained their academic standing in courses which did not include all the subjects of either of the groups of options.

(2) Students who hold Provincial professional certificates in Art, Physical Culture, and the Commercial subjects may be exempted from the examinations in such subject or subjects, but must review in class the special methods of the course concerned.

(3) Students who have passed in the Book-keeping and Writing of the Lower School or in the Art of the Middle School may be exempted from the extension work of the course in such subject or subjects, but must complete to the satisfaction of the instructor or instructors therein all classes dealing with the methodology of the subject or subjects and the concurrent academic work.

## ORGANIZATION OF COURSES

21. (1) The following introductory work will be taken up at the beginning of the session:

(a) Not more than 20 lectures upon the topics *Introduction and General Method* in the course in the Science of Education.

(b) A discussion of the functional value of each of the courses defined herein.

(c) Supervised observation and practice lessons, not more than ten each, in the different grades or forms of the Lower and Middle Schools of the High Schools.

(2) The instruction in the special methodology of the subjects of Part II, Groups A and B, will be accompanied by a review of such subjects from the academic standpoint as prescribed for the Lower and Middle Schools of the High Schools. This review will be limited to such portions of each subject in Group A as may be necessary to determine the scholarship of the teachers-in-training and to illustrate the methods of instruction in that subject, dealing in particular with those parts of the course that are difficult of presentation. To a review of the subjects of Group B will be added such an extension of the work of the Lower and Middle Schools of the High Schools as time will permit.

(3) In the order and grouping of the courses due regard will be had to the character of each subject, to its correlations with other subjects, and to the logical development of the courses.

(4) So far as the conditions permit the programme of instruction will be organized on the basis of intensive study of a few subjects at a time.

(5) (a) The programme of instruction, exclusive of observation and practice-teaching, will require approximately 20 lectures of 45 minutes each, weekly, during the session. These lectures will be distributed among the various prescribed courses approximately as follows: History of Education, 50; Science of Education, 70; School of Organization and Management 50; English 90; Mathematics 90; History 15; Geography 15; Latin 35; Elementary Science 20; French 30; German 15; Greek 15; Physics, Chemistry and Biology 30; Book-keeping and Writing 10; Reading 20; Art 15; Physical Culture and Hygiene 120.

(b) (i) The courses in the Science of Education and School Management and Organization will begin at the opening of the session and continue until May 1; the course in the History of Education will begin in January and continue until May 1.

(ii) The courses in Mathematics, English, and Physical Culture and Hygiene will continue throughout the session; those in the other subjects will be given, as far as practicable, in correlation with the observation and practice-teaching, and will continue until completed.

(iii) The course in Book-keeping and Writing will be supplemented by practical exercises.



(c) The observation work will begin in the third week of the session, and the practice-teaching in the fifth week. Exclusive of the introductory work, the programme of instruction will include for each student at least 40 observation lessons and 20 practice-teaching lessons. These numbers may be increased to meet the needs of individual students.

## OBSERVATION AND PRACTICE-TEACHING

22. (1) The introductory course defined herein will be followed by systematic observation and practice teaching, under the general supervision of the instructors in the Faculty of Education.

(2) The students will be divided into suitable groups, and the work of observation and practice-teaching will be taken up systematically per time-table arranged from time to time. So far as practicable that group to which the teacher-in-training belongs will be present at the discussions on his observation and practice-teaching lessons.

(3) (a) The observation and practice-teaching lessons for each student will be arranged to represent as far as practicable the work in all forms and grades of the Lower and Middle Schools of the High Schools. There will also be observation in the Upper Schools of the High School and in Grade B and Grade C Continuation Schools.

(b) Continuous practice-teaching for several periods toward the end of the course will be required, the students being wholly responsible for the management of the classes.

(4) Students will be notified of the subject and the scope of the observation lesson, and should prepare the lesson beforehand. After observing the lesson, they will discuss it with the teacher concerned.

(5) Students will be notified of the subject and the scope of the practice-teaching lesson by the teacher concerned, and will prepare a plan of each practice-teaching lesson for submission to the teacher.

(6) (a) Model lessons will be taught by the teachers of the practice-schools in accordance with the regular programme of said schools.

(b) The instructors of the Faculty of Education will develop the details of their subject in the teaching order, and after each suitable step, will also themselves teach model lessons. At these lessons the teacher in charge of the class will be present.

(7) (a) The necessary applications of the Science of Education and of Special Method will be made systematically in connection with the observation lessons and the practice-teaching; so that the course may be taken up in terms of the pupil's mind and growth. From time to time the instructor in the Science of Education will himself illustrate by actual teaching the principles he has discussed in class.

(b) As far as practicable, the instructors of the Faculty of Education will be present at the observation lessons and practice-teaching and will share jointly with the teachers of the practice schools in the criticism and valuation of the work of the student.

## EXAMINATIONS

23. (1) For examination purposes the courses in Parts I and II are classified into the following subjects:

Part I: The History of Education, the Science of Education, and School Organization and Management.

Part II, Group A: Literature; Grammar; Composition; Arithmetic; Algebra; Geometry; History; Geography; Latin; the options, Science (i.e. Elementary Science, Physics, Chemistry and Biology), Moderns (i.e. French and German), or Greek and a Modern Language.

Part II, Group B: Reading, Art, Physical Culture, Hygiene.

Part III: Observation; practice-teaching.

(2) (a) Subject to the provisions of (c) below, the final standing of students in attendance will be determined by the result of the records of the observation and practice-teaching of Part III, and the combined results of the sessional records and the records of the final examinations in the subjects of Parts I and II.

(b) The sessional records represent oral and written exercises and tests, practical work, practice in valuing the answer-papers of pupils, and such term examinations as the staff may prescribe.

(c) There will be final examinations in the subjects of all the Parts as follows: in Part I in May; in Part II, Group A, in June; in Part II, Group B, on the completion of the course concerned.

(d) (i) With the exceptions indicated below, the maximum marks assigned to subjects in Parts I and II will be 100. In the subjects of Part I and Part II, Group A, a maximum of 40% of the marks may be assigned to the sessional records, and 60% to the final written examinations. In the subjects of Part II, Group B, a maximum of 50% of the marks may be assigned to the sessional records and 50% to the final written examinations. The marks assigned to Physical Culture for the purpose of the Course for Elementary certificates in Physical Culture are given on page 29.

(ii) The maximum marks assigned to the History of Education will be 75, of which 30 will be assigned to sessional records and 45 to the final written examinations.

(iii) There will be no final written examination in Writing and Book-keeping. Each student must complete satisfactorily his practical work and tests throughout the session, including a short set in Single Entry with the accompanying business forms.

(c) A maximum of 800 marks will be assigned to practice teaching and 400 to observation. The standing of the student in observation and in practice teaching will be based upon his record in the lessons following those which form part of the introductory courses.

### CERTIFICATES

24. (1) A student who obtains 40% of the marks in each subject and 60% of the aggregate of the marks in each of Parts I, II, Group A, and II, Group B, and in each of the divisions of Part III, may, on the recommendation of the examiners, be awarded by the Minister of Education, an Interim Ordinary High School certificate.

(2) A student who fails to obtain an Interim Ordinary High School certificate, but who passes in Part III and makes 35% of the marks in each subject and 55% of the aggregate of the marks in each of Parts I, II, Group A, and II, Group B, may, on the recommendation of the examiners, be exempted by the Minister of Education during a period of two years from attendance at a Faculty of Education in order to obtain an Interim Ordinary High School certificate.

(3) All other students who have failed to obtain the necessary final standing will be required to attend another session, beginning after the Christmas vacation.

(4) (a) (i) Students who are exempted from attendance at a Faculty of Education, as provided in (2) above, may take, and must complete within two years, the examination or examinations in the Parts in which they failed.

(ii) Candidates who failed at an examination under former regulations and who were exempted from subsequent attendance at a Faculty of Education will take, not later than a date to be determined in each case by the Minister of Education, the final examination papers prescribed in Parts I and II, but their standing will be determined in the Parts as constituted under the regulations in force when they first wrote

(iii) Students who have been exempted by the Minister of Education from attendance at a Faculty of Education on account of equivalent training in other provinces or countries and who are required to write on the final examinations of the Faculties of Education will take all final examinations in the subjects of Parts I and II, and will also satisfy the examiners by teaching and other tests that they are competent for the work of Group B of Part II.

(b) (i) The pass standard for students exempt from attendance will be 40% of the marks in each subject and 60% of the aggregate of marks in each of Parts I, II, Group A, and II, Group B, and in the teaching of Part III.

(ii) No allowance will be made for sessional work in the case of candidates not in attendance.



(iii) The final examination in Reading and Physical Culture for students exempt from attendance, will include a practical test to which 50% of the marks for the subject will be assigned, and also a written test. In Writing and Book-keeping students exempt from attendance must complete satisfactorily such tests as the examiners may prescribe.

(c) (i) For all students exempt from attendance who so elect a special examination in Part II, Group B will be held at the close of the session in June.

(ii) Students exempt from attendance may take their written examination in Parts I and II at Kingston, or at such local centres and under such conditions as may be determined by the Senate. They must, however, take their practical tests in Reading, Physical Culture, and Teaching at Kingston.

### DIPLOMAS

25. Successful candidates who are awarded Ordinary High School certificates by the Minister of Education and such other successful candidates as may be admitted to the course under section 7 (2) may be awarded University diplomas.

### C.

### COURSES FOR INTERIM HIGH SCHOOL SPECIALISTS' CERTIFICATES

#### PURPOSE

26. The purpose of the courses for Interim High School Specialists' certificates is to prepare candidates therefor in the theory and art of organizing and instructing the pupils of the Lower, Middle and Upper Schools of the High Schools and Collegiate Institutes, in certain departments of the course of said Lower, Middle and Upper Schools.

#### CONDITIONS OF ADMISSION

27. (1) Applicants for admission to the courses for Interim High School Specialists' certificates, or to the final examinations for said certificates must also be applicants for admission to the courses for Interim Ordinary High School certificates, or must be applicants for admission to the examinations therefor without attendance throughout the session, or must already hold Ordinary High School certificates. No candidate will be awarded an Interim High School Specialists' certificate *before* he has been awarded an Interim Ordinary High School certificate.

(2) As a candidate for admission to the course for an Interim Ordinary High School certificate, the applicant for an Interim High School Specialists' certificate must comply with the conditions for admission prescribed for candidates for Interim Ordinary High School certificates. He must also have his academic standing as a specialist approved by the Minister of Education before he will be admitted to said specialist course or to the examination for the certificate.

### COURSES

28. (1) Courses will be offered for Interim High School Specialists' certificates in Classics, English and History, Moderns and History, French and German, Mathematics, Mathematics and Physics, and Science.

(2) Each specialists course will consist of at least one seminar per week throughout the session, and of special observation and practice-teaching in the specialist department in which the candidate is an applicant for a certificate.

### TEXT-BOOKS

29. In addition to the text-books prescribed for the course for the Ordinary High School certificate the students in the courses for High School Specialists' certificates will supply themselves with such special professional text-books as may be recommended by the instructors concerned.

### EXAMINATIONS

#### SUBJECTS AND STANDARDS

30. (1) Subject to the condition that no student may be awarded an Interim High School Specialist's certificate who does not already hold or is not also awarded an Interim Ordinary High School certificate, the final standing of students in attendance in a specialist course will be determined by the combined results of the records of the observation and practice-teaching in the department concerned, and of the sessional records and the records of the final examinations in the same department concerned. The sessional records represent oral and written exercises and tests, practical work, practice in valuing the answer papers of pupils, and such term work as the instructors may prescribe. The records of the final examinations will be based upon two examination papers taken in each department at the close of the session. The maximum marks represented in the special observation and practice-teaching will be 100; in the sessional records 40; and in the final written examinations of the department 60.

(2) The final standing of students not in attendance will be determined by the final written examinations and by teaching in the department concerned. For this purpose the maximum of marks in each case will be 100.

## CERTIFICATES

31. (1) On the recommendation of the examiners the Minister of Education may grant Interim High School Specialists' certificates to students in attendance who have fulfilled the conditions of the course for Interim Ordinary High School certificates, who have obtained 60% of the aggregate of marks represented in the sessional records and the records of the final examinations, and who have obtained 60% of the marks assigned to the observation and practice-teaching respectively, in the specialist department.

(2) On the recommendation of the examiners the Minister of Education may grant Interim High School Specialists' certificates to students exempt from attendance who hold High School Assistants' certificates, who hold also the necessary academic certificates as specialists, and who obtain 60% of the marks assigned to the written examination in the specialist course concerned.

(3) For students in attendance as well as for those not in attendance the final written examinations in the courses for Interim High School Specialists' certificates will be held at the end of the session at Kingston or at such local centres and under such conditions as may be determined by the Senate.

## D.

### COURSES FOR INTERIM FIRST CLASS GRADE A CERTIFICATES

32. (1) For Interim First Class Grade A certificates there will be two courses, limited to the Autumn term:

Course I will be open to students who hold Ordinary High School or High School Specialists' certificates and will prepare students for positions in the Public and Separate Schools, being supplementary to the courses of the Regular session for Interim Ordinary High School certificates.

Course II will be open to students who hold First Class Grade B certificates or First Class certificates obtained under former regulations, and will prepare students for positions in Grade B Continuation Schools and for the Elementary certificate in Physical Culture, being supplementary to the courses of the Regular session for Interim Grade B certificates.

(2) For Course I, the subjects will be as follows:

Part I: History of Education, Science of Education, School Organization and Management.

Part II, Group A: Grammar, Literature, Composition; Arithmetic; History; Geography.



Group B: Reading, Writing, Vocal Music, Nature Study, Art, Physical Culture, Manual Training, Household Science (for women).

Part III: Observation in the Kindergarten and Form V and in Rural Public and Separate Schools and observation and practice-teaching in the Kindergarten-Primary and in Forms I to IV of the Urban Public and Separate Schools.

(3) For Course II, the subjects will be as follows:

Part I: History of Education, Science of Education, School Organization and Management.

Part II, Group A: Literature, Composition; Algebra, Geometry; History; Latin; the optional subjects prescribed for Ordinary High School certificates.

Group B: Physical Culture, Art.

Part III: Observation and practice-teaching in the Lower and Middle Schools of the High Schools and observation in the Upper Schools of the High Schools.

(4) In Course II a course leading to an Elementary certificate in Physical Culture will be provided supplementary to the course in that subject for candidates for First Class Grade B certificates at the Regular session.

(5) Further information in regard to the courses for Interim First Class Grade A certificates will be published before the close of the Regular session of 1917-1918.

## E.

### COURSE FOR ELEMENTARY CERTIFICATE IN PHYSICAL CULTURE

#### PURPOSE

33. The purpose of the course for the Elementary certificate in Physical Culture is to prepare candidates therefor in the theory and art of organizing, governing, and instructing in Physical Culture the pupils of Continuation and High Schools.

#### CONDITIONS OF ADMISSION

34. (1) Students who have been admitted to the course for Interim Ordinary High School certificates will take also the course for Elementary certificates in Physical Culture.

(2) Students who hold First Class Grade B certificates or First Class certificates under former regulations and who have been admitted to the course for First Class Grade A certificates will take also the supplementary course for the Elementary certificate in Physical Culture.

## SESSION

35. (1) For students in the course for Interim Ordinary High School certificates the course for Elementary Certificates in Physical Culture continues throughout the regular session.

(2) For candidates for Interim First Class Grade A certificates the courses in Physical Culture will continue throughout the Supplementary Session.

## TEXT-BOOKS

36. Students in the course for Elementary certificates in Physical Culture will supply themselves with such text-books as may be recommended by the instructors from the list given below.

## PROGRAMME OF STUDIES

37. The details of the contents of the course for Elementary certificates in Physical Culture are to be found on page 60.

## EXAMINATIONS

38. The final standing of candidates for the Elementary certificate in Physical Culture will be determined by the results of the sessional work, final practical tests, and written examinations. For this purpose the sessional work will be allotted a maximum of 200 marks, the final practical tests a maximum of 200 marks, the final written examination, which will consist of four papers or subjects, 400 marks (100 each).

## CERTIFICATES

39. (1) On the recommendation of the examiners the Minister of Education may award an Elementary certificate in Physical Culture to the student in the course for an Interim Ordinary High School certificate or the course for an Interim First Class Grade A certificate (Course II), provided that said student is awarded an Interim Ordinary High School or Interim First Class Grade A certificate and obtains in Physical Culture a minimum of 40% of the marks for the sessional work, and for each subject of the final written examination, 60% of the marks for the final practical tests, and 60% of the aggregate of marks for the final written examinations

(2) On the recommendation of the examiners the Minister of Education may award Elementary certificates in Physical Culture to the students in Course II for Interim First Class Grade A certificates who fail in said course but who pass in the course for Elementary certificates in Physical Culture.

## DETAILS OF COURSES

### FOR FIRST CLASS GRADE B, ORDINARY HIGH SCHOOL, HIGH SCHOOL SPECIALISTS' CERTIFICATES AND ELEMENTARY CERTIFICATES IN PHYSICAL CULTURE

1. (1) The details given below include a statement of the contents of each of the subjects of the courses for Interim First Class Grade B, Ordinary High School and High School Specialists' certificates, and Elementary certificates in Physical Culture. The details of the course for Interim First Class Grade A certificates will be published before the close of the Regular session of 1917-18.

(2) The bibliographies given below contain lists of books available for reference in the library of the Faculty of Education. From time to time the instructors will give directions as to the use of these reference books. All candidates for Interim First Class Grade B and Ordinary High School certificates, however, should supply themselves with copies of the books whose titles are marked with asterisks. In certain cases where the book so marked is limited in the main to the work of primary education, candidates for Interim Ordinary High School certificates will be recommended to supply themselves with additional or special books. The instructors concerned will make known the text-books to be used in the courses for Interim Specialists' certificates and Elementary certificates in Physical Culture.

### *Part I*

#### HISTORY OF EDUCATION

2. (1) Candidates for Interim Ordinary High School certificates and Interim First Class Grade B certificates will take the course in the History of Education as detailed below. The instruction for the Ordinary High School certificate will stress the movements in Secondary and Higher Education since the Renaissance, that in the First Class Grade B Course will stress the movements in Primary Education.

(2) The object of the course in the History of Education is to widen the professional outlook and rationalize school practice through the discussion of the development and of the merits and defects of educational theories. It presupposes an historical background and discusses movements rather than individuals.

(3) Throughout this course attention will be given to the social conditions and ideals from which the educational theories and practices arose. As a part of the national development education will be studied



in its relationships and not as an isolated phenomenon. Section A will be studied in outline; B, in greater detail

(4) A. Evolution of education in primitive society. Oriental education. Educational ideals of eastern and western nations compared. Greek life and civilization. Old Greek education with Spartan education as its type. The sophists and the great educational theorists, Socrates, Plato, and Aristotle. The idea of a liberal education. Roman life and civilization. Roman educational ideals and practices contrasted with those of Greece. Great educational theorists, Cicero and Quintilian. The idea of a practical education. The education of the monastery and the castle. Education in Charlemagne's empire and in England and Ireland. Scholasticism and the rise of the universities. The Renaissance and the rise of humanism. Educational significance of the Renaissance. The work of Petrarch, Vittorino da Feltre, Erasmus, Elyot, Ascham and Sturm. The Reformation and Counter-reformation. Luther and elementary education. The Jesuits and the Teaching Orders. Realism and science in education. Types of realism represented by Rabelais and Montaigne, by Mulcaster, Milton, Locke, and by Bacon and Comenius.

B. Education according to nature. Development of the new ideal in Rousseau and Basedow. The psychological ideal in education as represented in the work of Pestalozzi, Herbart, and Froebel. The development of public education in Great Britain, France, the United States, Germany, and Ontario. Present-day tendencies in educational administration and organization.

#### Books of Reference:

- \* Ontario Normal School Manual, *History of Education*.  
Adamson, *Pioneers of Education*.  
Laurie, *Educational Opinion Since the Renaissance*.  
Monroe, *A Brief Course in the History of Education*.  
Munro, *The Educational Ideal*.  
Parker, *History of Modern Elementary Education*.

### SCIENCE OF EDUCATION

3. (1) Candidates for the Interim Ordinary High School certificate will take the course in the Science of Education as defined below. In the Ordinary High School course the applications and illustrations of the subject will be found in the main field of secondary education; in the First Class Grade B course they will be found in the main in the field of Primary education.

(2) The object of the course in the Science of Education is to provide the teacher with a working conception of the nature of education

and of child nature which will be useful to him in forming ideals and determining procedure, to give him a rational basis for intelligently evaluating and selecting subject matter and methods of instruction, and to improve natural tact and skill through the acquisition of experience and knowledge.

(3) The following are the sections of the course and their topics:

A. *Introduction*: Democracy and education; the need for education in a democracy; formal and informal studies; increasing formalization of studies; the place teacher-training occupies in a modern educational system.

*General Method*: Meaning of method; special method and general method, psychologic foundations of method; matter and method; typical school-room procedure and devices; questioning; discipline; types of lessons; lesson plans; preparation of typical lesson plans; methods of study.

*Educational Psychology*: Heredity and environment as factors in human development; native gifts of human beings; instincts and capacities; their value in education; sense organs and sensation; habit; methods of learning; practice; fatigue; interest; attention; suggestion; imitation; memory; imagery and imagination; emotions; perception; reasoning.

*Child Study*: Physical growth of the child; significance of infancy for education; development of mental powers and capacities; development of special powers like language, imitation, imagination and memory in children; studies of children's drawings, writings, fears, plays, and so forth.

*Principles of Education*: The possibility of a science of education; the meaning and aims of education; ultimate and proximate aims; statement and critical examination of typical ultimate aims; individual and social elements of education; school as a society; conservative and progressive elements in education; control of education by the state, home, church, vocation, etc.; the curriculum; psychological and sociological aspects of the curriculum; the selection of the curriculum; election of studies; present-day movements for the reform of the curriculum; the curriculum as an agency in moral instruction and training; measurement of results in education.

B. *Educational Classics*: The study in class of certain educational classics selected from the following list: Milton, Tractate on Education; Locke, Some Thoughts Concerning Education; Rousseau, Emile; Pestalozzi, How Gertrude Teaches Her Children; Froebel, The Education of Man; Spencer, Education; Dewey, The School and the Child.

Books of Reference:

- \* Ontario Normal School Manual, *Science of Education*.
- Dewey, *The School and Society*.
- Dewey, *The School and the Child*.
- Drummond, *The Child*.
- James, *Talks to Teachers on Psychology*.
- Kirkpatrick, *Fundamentals of Child Study*.
- McDougall, *Psychology*.
- Pillsbury, *Essentials of Psychology*.
- Raymont, *Principles of Education*.
- Ruediger, *Principles of Education*.
- Sandiford, *Mental and Physical Life of School Children*.
- Scott, *Social Education*.
- Strayer and Norsworthy, *How to Teach*.
- Thorndike, *Principles of Teaching*.
- Thorndike, *Education, a First Book*.

SCHOOL ORGANIZATION AND SCHOOL MANAGEMENT.

4. (1) The instruction in Section A will be in the main common to candidates for Interim Ordinary High School certificates and Interim First Class Grade B certificates. In Section B the applications and illustrations will be confined in the main to the field of education in which the candidates' interests lie. Throughout the course special reference will be made to the Ontario School Law so far as it may relate to the discussion of the foregoing topics, and in particular so far as it may refer to the duties of teachers and pupils.

(2) The object of the course in School Organization and Management is to give the teacher a knowledge of the technique of school management and organization which will enable him to secure the smooth and efficient working of his school.

The following are the sections of the course and their main topics:

(3) A. School Management and School Organization; the aims and scope of each; relation of each to the teaching process.

Forms of educational control; executive and legislative functions of Department of Education; school boards and their functions, relation of inspectors and principals to teachers; teachers to parents, pupils, caretakers, trustees; finance of education, local and provincial burdens; business administration.

Types of schools; functions of each type, primary, secondary and higher schools; consolidated schools; day and evening schools; training schools; commercial, industrial, agricultural or technical schools, schools for subnormal children, defectives, and delinquents.

B. School sites and surroundings; school buildings; construction, care-taking, heating, ventilation, lighting, sanitation, decoration, equipment; libraries and apparatus; text-books, their authorization, use and abuse; free text-books.



The teacher; characteristics, qualifications, and certificates; appointment, tenure, promotion, improvement of status; superannuation of teachers; duties of teacher in relation to pupil.

The pupil; privileges and duties; classification; grading; promotion, retardation and elimination.

The first day in school.

The recitation; its relation to management; oral and written exercises; examinations; records; prizes and other incentives.

School discipline; its scope; relation to methods of teaching; incentives; methods of dealing with weaknesses and offences; penalties.

Time-tables and daily programme for various types of schools; attendance records.

The school library; selection and cataloguing of books; methods of use; means of securing the co-operation of the home and the Public Library.

Visual aids: their use and abuse.

School hygiene; medical and dental inspection.

Books of Reference:

*The Regulations and Courses of Study for the Public, High, and Continuation Schools of Ontario.*

\* *The Ontario School Acts, and Public Health Act.*

\* *The Ontario Normal School Manual, School Organization and Management.*

Bagley, *Class Management.*

Landon, *Principles and Practice of Teaching and School Management.*

## Part II

### SPECIAL METHODS

5. Having due regard to the certificate for which each student may be a candidate, the courses in Special Methods are intended to prepare the student for his observation and practice-teaching in the various practice-schools of the Faculty of Education and for his subsequent teaching in the schools of Ontario, by leading him to adjust his work in each subject to the principles of General Method. To this end each course in Special Method will be introduced by a few lectures on the application of the principles of General Method to the teaching of the special subject. The lectures which follow will deal with the topics that appear under each subject below, and in particular with the selection and organization of the subject-matter of said subject for the various Public, Continuation or High School forms and grades, as the case may be. In the illustration of the methodology those topics of the school courses which are most difficult of presentation will be emphasized. The principle of the correl-

ation of studies will be kept constantly in view as being one of the most important topics in each of the courses in methods. The lectures will have always in view the provisions of the Ontario Public, Continuation, and High School courses of study.

## READING

6. (1) Candidates for Interim First Class Grade B certificates will take Sections A. B. and C; candidates for Interim Ordinary High School certificates will take Sections A and C.

(2) The special object of the course in Reading is to prepare the teacher-in training to train his pupils to find for themselves the writer's thoughts and feelings and, if necessary, to communicate them to the listener so that he may appreciate them.

(3) The following are the sections of the course and their main topics:

A. Introductory: The importance of training in reading and in the principles of vocal expression to the pupil's ordinary speech and general culture; a brief synopsis of the history of reading; the problems of reading as exemplified through present-day investigations.

The Reading Process; the factors involved in the process; the work of the eye in reading; word-recognition, the reading process as a specialized mode of the thought process; the relation of ideas to symbols; constant necessity for associating the printed symbol directly with the idea; the ideal conditions for the formation of this association.

Forms of Reading: silent reading; sight reading; dramatic reading; elocution; declamation.

B. Methods: The problem of primary reading; the various methods of teaching beginners to read, merits and defects of each; the combination method as outlined in the primary reading manual; devices for securing rapid work-recognition and for fixing attention on the thought and feeling as well as upon the word forms; expressive reading in all grades of the Public School and the Lower School of the High School.

The nature and function of silent reading; the conditions under which the pupil is able to comprehend the thoughts and feelings of the printed page; methods of conducting lessons in silent reading; the necessity for giving attention to expression at all stages; expression to be based on impression; the basis of natural expressive reading; the criticism of pupil's reading; the place and limitations of imitative reading.

Change in purpose and methods of reading as determined by the development of the pupil's experience and powers; methods of developing in the pupil the habit of reading for thought and pleasure; the correlation of reading with other subjects.

C. The principles of vocal expression: Time, pitch, inflection, force, stress, quality, phrasing, emphasis, exercises for rendering the organs of speech subservient to the will; vocalization, articulation, breathing, development of chest and lungs, vocal training for pure tone; the connection between the reading lesson and the singing lesson. Methods of teaching reading in the Lower School of the High School.

Practice: Voice training: A class in expressive reading for students; this work to be supplemented by practice in connection with the activities of the Literary Society and the Dramatic Club.

Tests: Reading tests, e.g., The Courtis Standard Test in Reading.

#### Books of Reference:

\* *Public School Manuals: Primary Reading.*

✓ *Ontario High School Reader.*

Huey, *The Psychology and Pedagogy of Reading.*

### LITERATURE

8. (1) All candidates are required to have a knowledge of the topics of the course outlined below as related to their interests; and candidates for Interim First Class Grade B certificates will stress Section A, and candidates for Interim Ordinary High School certificates Section B.

(2) The special object of the course in Literature is to prepare the student to create in his pupils a taste for good literature and to provide them with an ennobling means of enjoying their leisure, while broadening their knowledge, moulding their characters, and aiding them to appreciate the beauty and power of artistic expression of thought and feeling.

(3) The following are the sections of the course and their main topics:

A. Introductory: The standards of good literature; its value in developing a taste for the beautiful and the good; special importance of the teacher's own qualifications.

Selection of subsequent matter, bases of selection of material for different grades; lists of suitable fairy tales, fables, nature stories. etc., adapted to children of lower grades and of works suitable for pupils in higher forms; complete wholes *versus* extracts.

Methods: Supplementary reading contrasted with exact study; the extensive and intensive study of literature, the importance and method of memorizing selections; the value of oral reading in the interpretation and appreciation of literature; the methods of using the *Golden Rule*

#### Books.

Lesson Procedure: Preparation of the pupils; necessity for preparing a suitable mood for the lesson; how far the author's biography and



the experience of the pupils have a place here; preliminary reading of the selection; the main thought of the lesson grasped and the main feeling of the lesson impressed in a more or less indefinite way through a reading of it; the analysis of a selection into its wider thought elements and feeling elements, and the analysis of these again into their elements; the place of explanation of words and phrases; final synthesis and final reading of the selection; the necessity for some form of self-expression; common faults on the part of both pupil and teacher and their correction; criticism by teacher and pupils.

Examinations: Difficulties of examining in literature; specimen examination questions and discussion of their suitability.

B. The principles followed in Ontario and elsewhere in arranging literature courses in the Continuation and High Schools. Books suitable for intensive study in the various forms or grades of the Lower and Middle School. Class treatment of such types of literature as the short poem, the long narrative poem, the play, the short story, and the novel. High School examinations in literature. Supplementary reading in the High School: its importance; selection of books, testing of reading.

#### Books of Reference:

- \* Public School Manuals, *Literature; The Golden Rule Books.*
- MacClintock, *Literature in the Elementary School.*
- Arlo Bates, *Talks on the Teaching of Literature.*
- Bolenius, *Teaching Literature in the Grammar Grades and the High School.*
- Carpenter, Baker, and Scott, *The Teaching of English.*
- Chubb, *The Teaching of English.*

### GRAMMAR

9. (1) All candidates are required to have a general knowledge of the topics of the course as outlined below; and candidates for Interim First Class Grade B certificates will stress Section A and candidates for Interim Ordinary High School certificates, Section B.

(2) The special object of the course in Grammar is to prepare the student to give his pupils a basis for self-criticism in language by developing the principles of language structure and to train them in habits of logical analysis.

(3) The following are the sections of the course and their main topics:

A. Introductory: The meaning of English Grammar; its relation to speech; reasons for and against retaining it in elementary schools; reasons for deferring the formal study till Form IV; introductory work of Form III in connection with Composition.

Stages and Methods: The sentence; value of function; the parts of speech and their classification; inflection, use and value of the remaining

inflections, substitutes for inflection; rules of syntax, their value; treatment of false syntax; use of grammatical terminology; definitions, their value, how to be applied; analysis and parsing; aim and value of elementary etymology, the derivation and composition of words. Methods of dealing with the above topics in the first presentation and in review.

B. Consideration of the courses in Grammar in Continuation and High Schools. What work should be covered in each of the years of the Lower School? Necessity of securing variety. Use of a text-book in grammar. Advantages and limitations of the inductive method in teaching grammar in the High Schools. Review of the more important sections of the Ontario High School Grammar.

Books of Reference:

\*Public School Manuals, *Grammar*.

Carpenter, Baker and Scott, *The Teaching of English*.

Chubb, *The Teaching of English*.

### ORAL AND WRITTEN COMPOSITION

10. (1) All candidates are required to have a general knowledge of the topics of the course in Composition as defined below and as related to their interests; and candidates for Interim First Class Grade B certificates will stress Section A and candidates for the Ordinary High School certificate, Section B.

(2) The special object of the course in Oral and Written Composition is to prepare the student to train his pupils to speak and to write good English as a fixed, unconscious habit, and to think clearly and logically as a basis for clear, logical, and effective expression.

(3) The following are the sections of the course and their main topics:

A. Introductory: The value of language training; the constructive and the interpretative phases of the study of English; present-day tendencies in the teaching of composition.

Methods: How habits of speaking and writing good English are formed; expression as a stage in the development of every lesson; the forms of expression that aid most the development of language powers; the effect of the teacher's example upon the pupils' language; relative value of reading and telling stories; the story method; value of reading and memorizing good literature; incidental work in language training.

The relation of oral and written composition; purpose and value of oral exercises; criticism of oral work; the dangers connected therewith and the means of avoiding them.

The principles to be kept in view in conducting exercises in written composition; the method of gathering, selecting, and arranging material; value of topical outlines; supervision and aid during writing; the place of home work in written composition; the value of formal linguistic exercises; common errors; letter-writing and business-forms

The mechanics of written composition: Sentence and paragraph structure; paragraph compositions; the use of capitals, punctuation marks, quotation marks, abbreviations, etc.

B. The principles to be followed in arranging a High School course in composition; work suited to the age and experience of the student; use of a text-book in composition; amount of written work to be demanded; criticism of essays; standards of marking; place of rhetoric in the High School Course; importance of oral composition; sources of material; class procedure.

Books of Reference:

- \* Public School Manuals, *Composition and Spelling*.
- \* *High School Composition with Manual*.  
Carpenter, Baker, and Scott, *The Teaching of English*.  
Chubb, *The Teaching of English*.

SPELLING

11. (1) Candidates for Interim First Class Grade B certificates will take the course in Spelling. Candidates for Ordinary High School Certificates will take such parts as are related to their interests.

(2) The special object of the course in Spelling is to prepare the student to enable his pupils to reproduce in the mechanism of written word-expression the forms approved by the best usage.

(3) The following are the main topics of the course:

Introductory: The problem of spelling; a brief historical study of spelling to note (a) its varying relationships to the other subjects of the curriculum, (b) The changes in content, and (c) the improvement in method; a summary of the reports of recent investigations in the subject of spelling.

Materials: General principles of selection of material for spelling; different bases for grouping words for the purpose of spelling; number of words per lesson; the place and relative value of other subjects, the spelling book, grade lists, class lists, and individual lists in providing material for the spelling lesson.

Methods: Necessity for teaching, not merely testing, spelling; the various methods of teaching spelling; the adaptation of each to the nature of the words and to the individual mental characteristics of the pupils; value of rules in spelling.

Lesson Procedure: Assignment. Necessity for the close association of meaning, pronunciation, and form in spelling; how the meaning of the word should be developed; various devices for impressing the form of the word, e.g., visualization, oral spelling, transcription, syllabication, use of dictionary, word-building, word-grouping, etc.

Tests. Relative merits and defects of the oral and the written tests.



Detection of errors; relative merits and defects of the following means: by teacher, self-detection, by monitors, one pupil examines the work of another pupil.

Correction of errors; causes of incorrect spelling; the common type of error; prevention versus correction; methods of correcting errors.

Spelling tests, e.g., The Curtis Standard Test in Spelling.

#### Books of Reference:

- \* Public School Manuals, *Composition and Spelling*.  
Suzzallo, *The Teaching of Spelling*.  
Annandale, *The Concise Imperial Dictionary*.

### HISTORY.

12. (1) All candidates will take such topics of the course in History defined below as are related to their interests. Candidates for Interim Ordinary High School certificates will stress Section B and candidates for Interim First Class Grade B certificates will stress Section A.

(2) The special object of the course in History is to prepare the student to arouse in his pupils an interest in historical characters and events, to give them a knowledge of their civil rights and duties, to develop a love of high ideals, and to enable them to appreciate causal relations.

(3) The following are the sections of the course and their main topics:

A. Introductory: The scope of history; the special value of Canadian and British history; the proper perspective in the development of the subject; what makes an event important.

Stages and Methods: Special necessity for the adaptation of the teaching of history to the pupil's growing knowledge and logical capacity; the picture and story stage; a methodically arranged series of picturesque biographies graphically narrated; no text-book. The information stage; an introduction to history proper, methodically presented; external and picturesque side made prominent, with emphasis on biographical and social aspects; introduction of the history readers and biographies in the library. The reflective stage; the study of causal relations of the origin, development, and inner life of institutions.

The recitation, its forms and purpose; the place of oral teaching and of blackboard work by teacher, and of written exercises at seat and at blackboard by pupils; oral and written work; use of pictures, maps, etc.; of readers, of source books, of the text-book and of current journals and periodicals.

The selection and arrangement of material suitable for different grades; the place and purpose of each of the following:

History of aborigines; current history; history of pioneers; local history.

Characteristics of peoples; as those of the United States, Japan, China, Germany, France, Italy.

Biography: The natural attractiveness of biography; the relation of biography to history; the effect of the study of biography on the development of character; selection of suitable biographies for pupils of different grades; as the lives of explorers, navigators, and soldiers for primary grades; of statesmen, poets, scientists, etc., as representing more complex conditions, for pupils of higher grades.

Epochs: The relation of epochs to biographies; systematic chronological study of history, its value and its dangers; the causal sequence of events.

Civics: Ends to be kept in view in teaching of civics; consideration of work to be undertaken in civics; study of civic institutions as appearing in their lowest forms among primitive peoples; the beginnings of governments, of courts, school systems, of factories, of routes and means of transportation, etc., study of present forms of civic institutions.

Supplementary material: The use of mythology, ballads, orations, epics, legends, tales of chivalry, narrative poems, and historical novels; character of history readers and of supplementary work for the different grades. Significance and value of the flag. The causes and significance of the present great war.

A study of certain periods of British and Canadian history as prescribed for the Public Schools and the Lower School of the High Schools.

B. The reflective study of history and the methods which have been found specially suitable for the presentation of history to High School students. A study of certain periods of the history prescribed for the Lower and Middle Schools. Students will be required to show their ability to gather material for essays or discussions on historical topics, and to present it in acceptable form.

#### Books of Reference:

- \* Public School Manuals, *History*.
- Bourne, *The Teaching of History and Civics*.
- Johnson, *The Teaching of History*.
- Macpherson, *Visual Aids in the Teaching of History*.
- The Committee of Seven, *The Study of History in Schools*.

### SEMINAR IN ENGLISH AND HISTORY.

13. (1) In addition to the courses in English and History for Interim Ordinary High School certificates, students in attendance who are candidates for Interim High School Specialists' certificates in English and History or Moderns and History will take the seminar in English and History.

(2) The work in English will include:

- (a) A study of particular topics which are difficult of presentation.
- (b) A discussion of the organization of the course in English throughout the various forms of the High School.
- (c) A study of the methods of class-room procedure in the teaching of English, and of problems arising therefrom.

Books of Reference:

Bolenius, *Teaching Literature in the Grammar Grades and High Schools.*

Carpenter, Baker and Scott, *The Teaching of English.*

Chubb, *The Teaching of English.*

Articles in "The English Journal."

(3) The work in History will include:

- (a) A study of particular periods of the prescribed History.
- (b) A discussion of the courses in History that are adapted to pupils of various ages, and of the corresponding methods of teaching.
- (c) A study of the method of research in history, and the preparation of essays on assigned topics.

Books of Reference:

Allen, *The Place of History in Education.*

Johnson, *The Teaching of History.*

Keatinge, *Studies in the Teaching of History.*

Langlois and Seignobos, *Introduction to the Study of History.*

Articles in "The History Teacher's Magazine."

## ARITHMETIC

14. (1) All candidates will take Sections A, B, and C; candidates for Interim Ordinary High School certificates will stress Section C.

(2) The special object of the course in Arithmetic is to prepare the student to train his pupils to acquire facility, accuracy, and promptness in the use of numbers as applied to the problems of everyday life, and to reason correctly as the result of the logical processes required in arithmetical calculation.

(3) The following are the sections and their main topics:

A. Introductory: A brief study of present-day educational movements: the fundamental changes in the purpose and method of teaching arithmetic; the content selected for teaching; and the relation of arithmetic to the life of the child.

The origin of number, the various steps involved in the development of the number idea; the unit, its nature and use; the necessity for standard units; number, a ratio.

B. Methods: Analysis and synthesis, induction and deduction, illustrated and applied; the use of concrete material and apparatus; use of graphic methods; drill and devices to secure neatness, accuracy and



rapidity of computation; importance, place, and treatment of mental arithmetic.

The value of problems; selection of problems; interest in problems for which the pupils themselves furnish the materials; where and how to assist pupils; type solutions; the unitary method, its merits and limitations; solutions by full analysis and by performing only necessary operations.

The various arithmetical operations and their application, with special stress upon the methodology of the elementary work:—

Counting; measuring with standard units; numbers from 1 to 10; 10 to 20, etc.; number pictures; notation and numeration.

Addition; its point of contact with previous work; addition tables; order of exercises; devices, tests.

Subtraction; relation to counting and addition; additive and decomposition methods; subtraction tables, order of exercises; devices, tests.

Multiplication; relation to addition and subtraction; tables; order of exercises; tests.

Division; relation to subtraction and multiplication; short and long processes; order of exercises; factors and factoring; cancellation; division by factors; checking; tests.

Fractions: (a) vulgar, different interpretations; numeration and notation; operations; conditions under which these operations can be performed; measures and multiples; (b) decimal; as special fractions and as complements of common notation; correspondence of methods with those of integers.

Compound rules; tables of weights and measures; reduction; operations.

Checking and verifying of results in arithmetic.

C. Square root by factoring and by the formal method, illustrated geometrically and algebraically.

Commercial arithmetic; how to make topics like discount, stocks, exchange, etc., concrete to the pupil. Use of tables in calculating interest, discount, taxes, etc.

Mensuration, the application of arithmetic to space relations, theoretical and practical methods of obtaining formulae, practical problems to show the use of these formulae. The necessity of models in teaching mensurations.

The metric system, when and how it should be taught.

Tests: Arithmetic tests, e.g., the Courtis Standard test in Arithmetic.

#### Books of Reference:

- \* Public School Manuals, *Arithmetic*.
- McMurry, *Special Method in Arithmetic*.
- Schultze, *The Teaching of Secondary Mathematics*.
- Smith, *The Teaching of Elementary Mathematics*.
- Suzzallo, *The Teaching of Primary Mathematics*.
- Young, *The Teaching of Mathematics*.

## ALGEBRA

15. (1) All candidates will take the course in Algebra as defined below. For candidates for Interim First Class Grade B certificates the applications and illustrations will be limited in the main to the work of the Lower School of the High School. For candidates for the Interim Ordinary High School certificates they will be selected from the work of the Lower and Middle Schools.

(2) The special object of the course in Algebra is the same as that of the course in Arithmetic.

(3) The following are the main topics of the course:

Arithmetical algebra; transition from arithmetic to algebra; generalization of language and of method; the introduction and defining of symbols; the negative quantity; the simple rules; the distributive law, commutative law, index law, sign rule; the equation and its place in algebra; factoring; highest common factor and lowest common multiple; use of detached coefficients; classes of simple equations; symmetry and its applications in elementary algebra; square root and its method of dealing with problems and the object to be kept in view in their solution; verification of results; correlation of algebra and geometry; graphical methods of illustrating formulae and of interpreting the roots of simple and quadratic simultaneous equations.

### Books of Reference:

Schultze, *The Teaching of Secondary Mathematics*.  
Smith, *The Teaching of Elementary Mathematics*.  
Young, *The Teaching of Mathematics*.

## GEOMETRY

(16) (1) All candidates will take the course in Geometry as defined below. For candidates for Interim First Class Grade B certificates the applications and illustrations will be limited to the work of the Lower School of the High School; for candidates for the Interim Ordinary High School certificates, they will be selected from the work of the Lower and Middle Schools.

(2) The special object of the course in Geometry is to prepare the student to train his pupils to attain skill in accurate measurements and in drawing, and through these in inductive and deductive reasoning.

(3) The following are the sections of the course and their main topics:

Practical geometry to precede the theoretical; use of instruments; paper folding; necessity for accuracy; distinction between practical geometry and geometrical drawing; limitation of appeals to the concrete; value of experimental proofs; need of clear and definite conceptions of the fundamental truths; the place of the definitions and axioms; when and how they should be introduced; the proposition; what

should be done in the class and what at home; the analytic-synthetic method of dealing with propositions and deductions; the comparative values of propositions and exercises; how to get pupils to work original exercises; necessity for original work from the beginning of theoretical geometry; the indirect method of demonstration; methods of class teaching and class hearing; importance of note-books for pupils' exercises; the grouping and relating of propositions; practical applications; algebraic solutions; Euclid's method compared with modern methods.

Books of Reference:

Schultze, *The Teaching of Secondary Mathematics*.  
Smith, *The Teaching of Elementary Mathematics*.  
Young, *The Teaching of Mathematics*.

### SEMINAR IN MATHEMATICS

17 (1) In addition to the courses in Mathematics for the Interim Ordinary High School certificate the student who is a candidate for an Interim High School Specialist's certificate in Mathematics will take the seminar in Mathematics as defined below, and the student who is a candidate for an Interim High School Specialist's certificate in Mathematics and Physics will take the seminar in Mathematics, together with such portions of the seminar in Science as the instructors therein may direct.

(2) The seminar in Mathematics will discuss methods in Trigonometry and the more advanced parts of Algebra and Geometry; the order of presenting the parts of these subjects so as to secure the most logical and impressive relation among the parts; the relations of the subjects themselves; the place of the teacher in dealing with more mature minds; the history and development of such special topics as the algebraic equation, the vulgar and decimal fraction, loci, maxima and minima, etc.; examinations in Mathematics: their purpose, when they should be held, the character of the paper, methods of marking, etc.

Books of Reference:

Fink, *A Brief History of Mathematics*.  
Schultze, *The Teaching of Secondary Mathematics*.  
Smith, *The Teaching of Elementary Mathematics*.  
Young, *The Teaching of Mathematics*.

### GEOGRAPHY

18. (1) All candidates will take the course in Geography as defined below. Candidates for Interim Ordinary High School certificates will stress Sections A, C, D, and E.

(2) The special object of the course in Geography is to prepare the student to extend the pupils' knowledge of the earth and its relation to life thereon, and to assist them in interpreting and utilizing their physical environment in accordance with their needs.



(3) The sections of the course and their main topics are as follows:

A. Scope of Geography: Difference from the other sciences dealing with the earth. Relation to History and to Nature Study. Methods of teaching geography: topical method, regional method, project method; advantages of each method; examples of topics treated by each method.

B. Elementary Geography: Method of teaching elementary geography with detailed treatment of typical topics; home geography; its importance as the basis of all geography; methods of making home geography concrete; observational work. Excursions to study local geography.

C. Regional Geography: Maps; different kinds, their use, importance of the physical map, map interpretation, map drawing, special maps. Use of pictures, globes, and other visual aids. The use of textbooks, readers, reference books.

D. Commercial Geography: Factors determining commerce with illustrations from Canada and other countries. Discussion of the chief commercial commodities, geographical factors determining their production and distribution. Relation of physical features to commerce.

E. Physical Geography: Physical geography the chief basis of commercial geography. Experimental treatment; use of such aids as contour, isobar, isotherm, and weather maps. Special attention to the interpretation of land and water forms in the province of Ontario. A discussion of the more important topics in physical geography in the High School course of study.

#### Books of Reference:

Andrews, *Seven Little Sisters*.  
Public School Manual, *Geography*.  
Geikie, *The Teaching of Geography*.  
Wallis, *The Teaching of Geography*.  
Holtz, *Principles and Methods of Teaching Geography*.  
Chisholm, *Handbook of Commercial Geography*.  
MacFarlane, *Economic Geography*.  
Mill, *International Geography*.  
Salisbury, *Physiography*.  
Tarr: *College Physiography*.  
Lake, *Physical Geography*.  
Dryer, *High School Geography*.  
Tarr & Von Engeln, *Laboratory Manual in Physical and Commercial Geography*.

#### LATIN

19. (1) All candidates will take the course in Latin as defined below. Candidates for Interim Ordinary High School certificates will extend their course to the Middle School work in Latin.

(2) The special object of the course in Latin is to revive and reinforce the students' acquaintance with the language, and to demonstrate

the value of its study, as the vehicle of a great literature, with its attendant intellectual and aesthetic culture, and as a means of acquiring a more accurate and comprehensive knowledge of the mother tongue.

(3) The introductory lectures deal with the relation of method in Latin teaching to linguistic method in general. They show how this object ought to affect the method of teaching the subject in its various departments, such as oral reading, grammar, translation, sight reading, and the literary or historical content. In connection with the demonstration classes these lectures also exemplify methods of teaching typical lessons in the different departments mentioned above. The introductory lectures are followed by a course in which the different phases of the subject are treated more extensively.

The following are the main topics of the course:

Oral Reading: A course in Roman pronunciation in the reading of Caesar and Vergil The metre of Vergil.

Inflection, with especial reference to nouns and adjectives of the third declension, comparison, pronouns, and the conjugation of verbs.

Syntax, with especial reference to the use of gerunds and gerundives, 'si' clauses, 'cum' clauses, the sequence of tenses, and the laws of indirect discourse. Exercises in Latin Composition

The teaching of Latin by the direct method.

Translation. The principles of idiomatic translation are applied to extracts from Caesar and Vergil.

In connection with the study of the authors, ways are suggested for the use of lessons on the grammatical difficulties of the text and on the literary or historic content.

Books of Reference:

Bennett, *The Teaching of Latin*.

Chickering and Hoadley, *Beginner's Latin by the Direct Method*.

Crawford, *On Pronouncing Latin*.

Hale, *The Art of Reading Latin*.

Westaway, *Quantity and Accent in the Pronunciation of Latin*.

## GREEK

20. (1) All candidates whose option is Greek take the course as defined below. Candidates for Interim Ordinary High School certificates will extend their course to the work of the Middle School, in particular, in translation and more advanced syntax.

(2) The object of the course in Greek is the same as that defined under Latin.

(3) The following are the main topics of the course:

Special difficulties in teaching Greek and how to meet them; pronunciation and accent.

Methods applied to lessons in First Greek Book

Review of Attic Greek Grammar, with particular reference to nouns and adjectives of the first and third declensions, comparison, verbs of the two conjugations, augment, reduplication, thematic and non-thematic second aorists, syntax of the conditional and unconditional relative clauses, uses of infinitives and participles, laws of sequence and indirect discourse.

The teaching of Homer with special reference to the metre, the dialectic forms, and the translation.

Books of Reference:

Bristol, *The Teaching of Greek*.  
Thompson, *Homeric Grammar*.  
Goodwin, *Greek Grammar*.  
Goodell, *Greek Grammar*.

THE SEMINAR IN CLASSICS

21. (1) In addition to the work in Latin and Greek (if Greek is taken as an option) required from all candidates for Interim Ordinary High School certificates, students who are candidates for Interim High School Specialists' certificates in Classics will take the seminar in Classics.

(2) In the Seminar in Classics topics are chosen germane to the teaching of Horace, Vergil, Cicero, Caesar, Xenophon, and continuous Latin prose Composition. During the session essays on these are required from each member of the class. The following list will show the nature of the topics for discussion:

The Teaching of Horatian metres. The poetic art of Horace. The translating of Horace into English prose. The use of metrical versions. Certain Asclepiadean odes. The national odes. Horace's treatment of religion, death, friendship, and fortune. The selection of "fine lines." The complete teaching of an ode of Horace. The appropriate commentary.

The teaching of Vergil in an honour class. The difficulties in translating Cicero. What T. Rice Holmes has done for the teaching of Caesar. The teaching of Latin prose composition. The teaching of Xenophon in an honour class. The classical library.

The Direct Method in Latin and Greek.

Books of Reference:

Bennett and Bristol, *The Teaching of Latin and Greek*.  
Johnson, *Pamphlets on the Teaching of Caesar and Vergil*.  
Hale, *Pamphlets on the Art of Reading Latin*.  
Articles in the "Classical Journal."



## MODERN LANGUAGES

### (French and German)

22. (1) The course in Moderns as defined below contains much that may be taken in common by candidates in the French and German options. Candidates for Interim First Class Grade B certificates will take Sections A, D, E, F, G, H, and such parts of I as apply to the Lower School work. Candidates for Interim Ordinary High School certificates should be familiar with all sections of the work.

(2) The special object of the courses in French or German is to prepare the student to train his pupils in the fundamental knowledge of the language to be studied, in respect to pronunciation, the grammatical difficulties encountered, the expression of his thoughts in the foreign language, and the interpretation of the thoughts of foreign authors into good idiomatic English; also to inspire in the pupils a love for what is best in the literature of France or Germany.

(3) The following are the sections of the course and their main topics:

(A) Introductory: Importance of language as a factor in education; language the vehicle of thought; value of linguistic training; aims of linguistic study fourfold:—for the general disciplinary value, as an introduction to the literature of France and Germany, as a practical means of acquiring knowledge of practical value in life, and as a means of intercourse with French and German people.

(B) History of methods: Consideration of methods formerly employed or still in vogue; the beginnings of modern language study; the grammar method; the natural method; the Psychological or "Gouin" method; the Reading method; the Direct or Reform method as used at France, Germany, Great Britain, and the United States.

(C) Study of methods: A comparison of these methods in view of the present conditions in our schools, the age and attainments of the pupil, the size of the class, the number of lessons per week, the regulations of the Education Department, the text-books in use; internal and external difficulties of language.

(D) Pronunciation: Good pronunciation is indispensable; the value of the study of phonetics; practical course in phonetics; the international phonetic alphabet; advantage of this knowledge to the teacher; phonetic texts and dictionaries; how the teacher may constantly improve his pronunciation; to what extent it is advisable to make use of phonetic symbols in the class-room; drill in pronunciation, how to conduct it; memorization of easy passages of prose and poetry; how to make the pupil self-critical; how to obtain phonetic charts and texts of value to the teacher and pupil.

(E) Elementary Classes: To be conducted without a text-book; oral work to be combined with the study of sounds; how to conduct such a

lesson; how to bring variety and interest into the lesson; conversation and how to conduct it; how to make use of objects of the class-room and pictures; value of work in unison; use of blackboard; grammar taught inductively from material supplied by the teacher; the proper method of keeping note-books; dictation and how to correct it to the pupil's best advantage; aids to the teacher in oral work, in books and pictures; necessity for thorough drill in essentials of pronunciation and grammar.

(F) Grammar: Inductive and deductive teaching of grammar; value of each method varies with the age and attainments of the pupil; grammatical rules and their value; use of mnemonics; the study of grammar as a means to an end; special illustrative lessons on essentials; learning of paradigms; importance of the verb; drill on the instruction given; teaching grammar aside from the text-book; study of the French or German portion of the exercise; use of the "questionnaire"; oral work in translation; advice to pupils in the preparation of the work at home; correction of home-work in the class; economy of time in correction work; drill on points misunderstood by the pupil; constant reading by the teacher to serve as a model for the class; constant reading by the pupil; oral work based on the work on the board; correction of his own work by the pupil; re-writing of work done badly; supervision of pupil's exercise-books; inculcating of habits of neatness and correctness; sending the pupil to the board to test the preparation,

(G) Special review lessons to aid the student to improve his knowledge in:

French Grammar: Accents, elision, liaison, the definite article and its uses, the indefinite article, the partitive article and exceptions; gender and number of nouns; agreement and comparison of adjectives; their position; possessive, demonstrative, interrogative, indefinite and numeral adjectives; conjunctive and disjunctive personal pronouns; demonstrative and relative pronouns; interrogative and indefinite pronouns; conjugation of regular and irregular verbs; the tenses of the indicative mood; conditional mood and conditional sentences; agreement of past participles; reflexive verbs; word order of the sentence; important idiomatic phrases and sentences.

German Grammar: Pronunciation; umlauts and other signs; capital letters, definite and indefinite articles and their uses; declension of nouns and adjectives; strong and weak verbs and their conjugations; tenses and uses of the indicative mood; the subjunctive mood; the conditional mood and conditional sentences; the passive voice; elementary knowledge of modal auxiliaries; prepositions and their government; the various pronouns; word order of the sentence; important idiomatic phrases and sentences.

(H) Translation into English: When to introduce the Readers; the grammatical preparation necessary; dangers to be avoided by teacher and pupil; transliteration and idiomatic translation; various methods of

conducting the recitation; correction of the pupil, cultivation of the literary taste; reading the text in French or German; questioning in the foreign language utilizing the extracts read; grammatical study of the text; use for dictation purposes; other purposes to which the text may be put.

(i) Composition: Advanced work to be based on models; oral drill on the Reader; free reproduction; original essays by the pupil; writing of letters; methods of correction, in small and large classes; training in the use of the dictionary and other aids.

(j) Bibliography: Students will be furnished with the addresses of the best houses which publish books of interest and value to the teacher. Lists will be given of the best books regarding grammar, oral work, pronunciation, manners, customs; dictionaries and general literature.

Books of Reference:

Jespersen, *How to Teach a Foreign Language*.  
Brebner, *Teaching of Modern Languages in Germany*.  
Bahlsten, *Teaching of Foreign Languages*.  
Breul, *Teaching of Modern Languages*.  
Savory and Jones, *Sounds of the French Language*.  
Dumville, *French Pronunciation*.  
Viot: *German Pronunciation*.  
*Report of the Committee of Twelve*.  
Bagster-Collins, *The Teaching of German*.

SEMINAR IN FRENCH AND GERMAN

23. (1) In addition to the work in French and German required from candidates for Interim Ordinary High School certificates, teachers-in-training who are candidates for the Interim High School Specialist certificate in French and German or in Moderns and History will take the seminar in French and German.

(2) The seminar will lay special stress upon the consideration of the value, aims, and methods of linguistic training; the relation of linguistic training to literary culture; history of methods formerly employed or still in use; the teaching of the modern languages in the secondary schools of France, Germany, Great Britain, and the United States; the necessity for higher ideals in Ontario; the Direct Method illustrated in the class-room; a study of French and German life, manners, and institutions; the importance of pronunciation; the value and use of phonetic symbols; use of phonetic charts and wall-pictures; typical lessons in grammar, conversation, translation, sight reading, prose composition; free reproduction exercises, dictation and audition; writing and correction of passages in French and German composition; consideration of books helpful to the teacher; the extent of the courses in the Upper School; writing essays on assigned subjects.



Books of Reference:

- Bagster-Collins, *German in Secondary Schools*  
Bahlsten, *Teaching of Modern Languages*.  
Brebner, *Method of Teaching Modern Languages in Germany*.  
Dumville, *French Pronunciation*.  
Geddes, *French Pronunciation*.  
Gouin, *The Teaching and Studying of Languages*.  
Jespersen, *How to Teach a Foreign Language*.  
Rippman, *Elements of Phonetics*.  
Savory and Jones, *Sounds of the French Language*.  
Sweet, *Practical Study of Languages*.  
Walter: *Zur Methodik des neusprachlichen Unterrichts*.

NATURE STUDY

24. (1) All candidates for interim First Class Grade B certificates will take this course.

(2) The special object of the course in Nature Study is to prepare the student to train his pupils to observe and interpret independently the world around them and to broaden and deepen their sympathies with nature.

(3) The following are the main topics of the course:

The Scope of Nature Study: Difference in aim from science; relation to elementary science, geography, agriculture, and physiology and hygiene. Various aims: training in observation, acquisition of useful information, practice in the investigational method, development of sympathetic interest in nature; aesthetic value of nature study; relation of nature study to rural life; books on nature study.

Material of Nature Study: Materials the same as for science, but differently treated. Danger of overestimating structure; the life of the organism most important for nature study; common and easily accessible material most suitable. The materials most useful for the different grades; best methods of securing materials; use to be made of the school garden, the home garden, and of the plants and animals of the farm; experimental treatment of the topics of the courses in Physics and Chemistry.

Method of Nature Study. Amount of time to be devoted to the subject and the proper distribution of the time. Importance of observation of living plants and animals, method of conducting such observation Pupils' records of bird migrations and of other periodical natural phenomena; pupils' collections, different kinds, their purpose and use; preparation and use of vivaria and aquaria; school excursions, value, method of conducting such excursions; the proper uses of books, charts, pictures, etc.; preparation and use of school museum; method of conducting lessons on selected topics of the course.

Books of Reference:

Public School Manual, *Nature Study*.  
Bailey, *The Nature Study Idea*.  
Comstock, *Handbook of Nature Study*.  
Dearness, *How to Teach Nature Study*.  
Hodge, *Nature Study and Life*.  
Scott, *Nature Study and the Child*.  
Silcox and Stevenson, *Nature Study*.

ELEMENTARY SCIENCE

25. (1) Candidates for Interim First Class Grade B certificates will take this course.

(2) The course in Elementary Science is an extension of the course in Nature Study into more formal work in Science and a preparation for the still more formal work in the Physics and Chemistry of the Middle School course and the Biology of the Upper School course

(3) The following are the main topics of the course:

Scope and value of the natural sciences; meaning of science and scientific method; educational value of science; inductive and deductive methods of investigation.

Experimental work: how conducted, how recorded; manipulation of apparatus; glass-working, breaking, bending, and drawing out of glass tubing; making of simple apparatus; class-room discussion, its purpose, method, and relation to the experimental work; the use of text-books; note-books, most suitable kinds, use and abuse, method of inspection; note-book drawing; reference books, most suitable books by pupils; supplement reading; methods in special topics of the biology, physics, and chemistry of the Lower School, and in some of the most important topics of the Middle School of the High Schools including their correlations with topics of the Public School courses of study.

Books of Reference:

High School Manual, *Suggestions for Teachers of Science*.  
Burland: *First Course in Zoology*.  
Woodhead, *The Study of Plants*.  
Bailey and Coleman, *First Course in Biology*.  
Gregory and Simmons, *Lessons in Science*.  
Public School Manuals, *Nature Study*, *Geography*, *Household Science*.

SCIENCE

(Physics, Chemistry, and Biology)

26. (1) Candidates for Interim Ordinary High School certificates will take this course.

(2) The Middle School course in Physics and Chemistry is an extension of the courses in these subjects in the Elementary Science of Lower School into the more practical and more formal work in the Physics and Chemistry of the Middle School with an extension of the Biology of the

Lower School. Here the purpose of instruction in Science becomes more evident. It gives the pupil a useful knowledge of his material environment and disciplines his powers of observation and his judgment.

(3) The course includes the main topics in the course in Elementary Science outlined above and the following additional topics:

Science laboratory equipment for each subject; methods of demonstration; use of technical terms, theories, facts, scientific laws; textbooks and reference books.

Chemistry: order of treatment; introductory work; method of conducting instruction in the following topics discussed and illustrated:—chemical laws and theories; valency; formulae and equations; nomenclature; qualitative and quantitative experiments; chemical arithmetic; the elements, with sodium and chlorine as types.

Physics: Methods of conducting instruction in the more difficult parts of the courses in heat, light, sound, magnetism, electricity, and mechanics.

Biology: Methods of treatment in class; dissection; experiments with plants; the microscope, its care and use; school museums; plant ecology; relation of structure to function; treatment in class of selected types of plants and animals, as the grasshopper, frog, hepatica, fern; practical acquaintance with the common plants and animals of Ontario; study of the habits of plants and animals in aquaria, vivaria and terraria.

The course in each subject will be illustrated by demonstration and practical work.

#### Books of Reference:

High School Manual, *Suggestions for Teachers of Science*.  
Ganong, *The Teaching Botanist*.  
Gregory and Hadley, *Class-book in Physics*.  
Lloyd and Bigelow, *The Teaching of Biology*.  
Smith and Hall, *The Teaching of Chemistry and Physics*.  
Wilson and Hadley, *School Chemistry*.

### SEMINAR IN SCIENCE

27. (1) In addition to such parts of the courses in Science as are prescribed for their course for Interim Ordinary High School certificates, candidates for Interim High School Specialists' certificates in Science will take the seminar in Science.

(2) The following are the main topics of the course:

Manipulation: Practice with the apparatus used in High School demonstrations; preparation of charts; the projection lantern; photography; the preparation of lantern slides; care of aquaria and vivaria; growth of plants for experiments in vegetable physiology; collection and



preservation of botanical and zoological material for Upper School work; use of microscope; mounting of specimens for microscopic examination; identification of minerals.

Equipment: Laboratory accommodation; arrangement of laboratories; lighting and ventilation; arrangement and structure of benches; care and purchase of apparatus; chemicals and minerals, most suitable kinds, method of preparation, and storage; most suitable reference books in Physics, Chemistry, Zoology, Botany, and Mineralogy; Scientific periodicals.

A discussion of the topics that are difficult of presentation to pupils, including the following:

Geological history of the Great Lakes in its relation to the physical features of Ontario; protection and colour of animals; Mendelism; plants in relation to insects; form and colour of flowers; parasitic and saprophytic plants; insectivorous plants; laws of combination in Chemistry; symbols, formulae, and equations; valency; atomic and molecular theories; Boyle's Law; Charles' Law; electron theory of matter; absolute temperature; relation of acceleration, momentum, force, and energy; surface tension; flow of liquids, geographical significance of minerals and rocks.

Books of Reference:

Ganot, Watson, and Edser, *Text-books in Physics*.  
Davis, *Natural History of Animals*.  
Kerner, *Natural History of Plants*.  
Mann, *The Teaching of Physics*.  
Mellor, *Modern Inorganic Chemistry*.  
Newth, *Chemical Lecture Experiments*.

VOCAL MUSIC

28. (1) All candidates for Interim First Class Grade B certificates will take this course.

(2) The special object of the course in Vocal Music is to enable the student to cultivate in his pupils a taste for good music, to provide an ennobling means of emotional self-expression, and to afford an agreeable change in the routine of school work and the occupations of daily life.

(3) The course will be both practical and theoretical and will include:

Tune: All intervals of the Major Diatonic Scale, both from the Tonic Sol-fa and staff; the relative minor of each major key; transition to the dominant and sub-dominant (sharp and flat keys).

Time: Whole pulse, continued pulse, silent pulse, and pulse divided into halves, quarters, and thirds, with the various combinations of these

in simple and compound double, quadruple, and triple times. All the above in both the Tonic Sol-fa and staff notations.

Ear-training in Time and Tune: Recognition of rhythm and tone, of short musical phrases when played or sung, and their expression in either notation.

Voice-culture: Breath control, tone production, vowel-formation, enunciation of consonants, correct intonation, blending of the registers, and general training for quality, range, and flexibility.

Sight-singing: Singing from pointing on modulator or staff. Singing at sight easy passages containing the varieties of time and tune mentioned above.

Songs: The study of songs, in one or two parts, suited to the requirements of pupils in all the grades of the Public School; with special attention to accent, enunciation, phrasing, quality of tone and expression.

Notation: Elements of notation, both Tonic Sol-fa and staff; the formation of the major and minor diatonic scales; elements of modulation and transposition.

Vocal Physiology: Anatomy of lungs, larynx, and resonating cavities; comparison of abdominal, intercostal and clavicular methods of breathing action of vocal chords in production of tone and of the various vocal registers; influence of resonating cavities upon quality of tone and vowel; care of voice in speaking and singing.

Methods: Students will be instructed in the grading of school music to suit the development of the pupils and in methods of teaching both systems.

#### Books of Reference:

- Cringan, *The Educational Music Course.*
- Cringan, *Teacher's Handbook of Tonic Sol-fa System.*
- Curwen, *The Standard Course.*
- Curwen, *The Teacher's Manual.*
- Hardy, *How to Train Children's Voices.*
- Mason, *How to Teach the Staff Notation.*
- Hulbert, *Breathing for Voice Production.*

### MANUAL TRAINING

29. (1) All candidates for Interim First Class Grade B certificates will take this course.

(2) The special object of the course in Manual Training is to enable the student to select and use in the most effective way constructive exercises which shall train the pupil's hand and eye, shall serve as a means of self-expression, shall correlate the work of the school with the activities of the home, and shall develop a sympathy with manual occupations.

(3) The following are the main topics of the course:

A. The need for Manual Training in the curriculum, its relation to the child and to the curriculum; its relation to industrial and technical education; comprehension and expression; educational value not opposed to practical utility.

Typical forms of constructive work adapted to the capacities of pupils in Forms I, II, and III of the Public School including weaving, elementary work in paper and cardboard, and modelling; their use as a means of expression and correlation.

Advanced work in cardboard; book-binding and simple repair of books; trimming and mounting of pictures.

Modelling; materials used in modelling natural forms; modelling in relation to the teaching of geography and primary reading; modelling as an aid to the teaching of drawing and design; free modelling as a means of expression.

Mechanical drawing; a short course with and without instruments; plans and blue-prints.

B. Wood-work; the workshop, tools and materials; how to keep tools in order; a short course in bench-work; woods suitable for construction work; designing.

C. Class management and organization.

Books of Reference:

Public School Manual, *Manual Training*.

Dobbs, *Primary Handwork*.

Baxter, *Paper and Cardboard Construction*.

Lester, *Claywork*.

Noyes, *Handwork in Wood*.

Prang, *The Manual Arts for Elementary Schools*.

Sargent, *Fine and Industrial Arts in Elementary Schools*.

Row, *The Educational Meaning of Manual Arts and Industries*.

## HOUSEHOLD SCIENCE

30. (1) All women students who are candidates for Interim First Class Grade B certificates will take this course.

(2) The special object of the course in Household Science is to enable the student to relate the work of the school to the activities of the home. It is also a form of Manual Training, and possesses the same educational value.

(3) The following are the main topics of the course:

A. Introductory: The scope of Household Science.

The House: Purpose; location; general ideas concerning use and furnishing of rooms; methods of cleaning, including principles of laundering.

Foods: Elements of food required by the body; sources, food value, and digestion of these; analysis of common foods—milk, eggs, meat, fruit, vegetables, cereals, effect of heat on these, as to food value, digestibility, and flavour; the principles of feeding during infancy and childhood.

**Cookery:** Principles of combustion; construction and care of stoves; fuels; principles and practice of each method of cooking—boiling, simmering, steaming, steeping, toasting, broiling, frying, baking; food combinations; flour mixtures; lightening agents used in these; table service.

**Bacteriology:** Occurrence and nature of bacteria; sanitation based on this knowledge (necessity for cleanliness, care of plumbing, disposal of waste, methods of disinfection); preservation of foods.

**Home Nursing:** The ideal sick-room (bath, bed, clothing, and food).

**B. Sewing:** Study and application of different stitches, basting, running, stitching, back-stitching, combination stitch, overcasting, top sewing, blanket, herring-bone, feather-stitching, mending, darning (different kinds), button holes, mitred and square corner, hemming, doll's apron.

Textile materials used; their identification, names, kinds, widths, and usual prices, variations of weave in regard to beauty and strength; growth, manufacture, and finish of cotton, silk, wool, linen and their use and value for clothing.

**C. Class Management and organization.**

**Books of Reference:**

Public School Manuals: *Household Science, Sewing.*

Greer: *Food and What it Does.*

Jones: *Lessons in Elementary Cooking.*

Daniels: *Furnishings of a Modest Home.*

Walker: *Manual of Needlework and Cutting-Out.*

## COMMERCIAL WORK AND WRITING

32. (1) All candidates for Interim Ordinary High School certificates and Interim First Class Grade B certificates will take this course. Candidates for Interim Ordinary High School certificates will stress Section A, while candidates for Interim First Class Grade B certificates will stress Section B.

(2) The special object of the course in Writing is to enable the student to record his thoughts and feelings rapidly and legibly so that they may be read with the least possible effort and to make him familiar with the best means of securing the same results with his pupils. The special object of the course in Book-keeping is to enable him to train his pupils to keep personal accounts.

(3) The course includes the following topics:

**A. Business Papers:** Receipts, promissory notes; drafts, orders, cheques, bank drafts, bills of goods, invoices, endorsement and acceptance and consequent liability.

**Book-keeping:** The nature of double and single entry. Changing from single to double entry. Practical exercises in book-keeping.



B. Writing: A brief outline of the different methods of teaching the subject.

Penholding; position at the desk; position of the paper; the proper formation of the small and the capital letters and the figures; various movement exercises; practice on paper and on the blackboard.

Use of headlines and copy-books; blank paper; its ruling; importance of writing in transcript, dictation, and composition; correction of general and individual faults; the formation of a characteristic hand; how to deal with pupils having some physical disability.

Practical exercises in writing.

Books of Reference:

Public School Manual, *Writing*.

The Ontario Writing Course.

The Public and High School Text-books in Book-keeping and Writing.

## ART

33. (1) All candidates for Interim First Class Grade B certificates will take Sections A and B; all candidates for Interim Ordinary High School certificates, Sections A and C.

(2) The aim of the course is to develop an appreciation of the beautiful, to impart skill in the use of art as a mode of expression, and to train teachers to communicate such appreciation and skill to their students.

(3) The course includes the following topics:

A. Introductory: The scope of art; its cultural and utilitarian value; a consideration of its application to Canadian industries.

Freehand drawing in outline and in value: When and how to use charcoal, crayons; brush and ink, pencil, pen and ink; the drawing in an appropriate medium of straight lines, of squares and circles, of rectangles and ellipses; the drawing of common flat objects, such as grasses, leaves, plates, trowels, a checker-board; the principles of free-hand and perspective as illustrated in the drawing of the cylinder and the cone, the rectangular prism and the square pyramid, and of common objects founded upon these simple models; the effect of light upon objects; the neutral value scale; the drawing of common objects in light and shade; the drawing of groups of objects showing good composition; the drawing of simple landscapes; the illustrating of games, occupations, stories, quotations, pose drawing.

Freehand drawing in colour: When and how to use coloured crayons and water colours, complementary colours; colour harmony; the graying of colours; the making and applying of graduated and uniform washes; the representation in colour of leaves, grasses, flowers, fruits, trees, insects, domestic animals, birds, and common objects; simple landscapes from nature; elementary composition of pictures.

Blackboard drawing; its importance to the teacher; rapid illustrative sketches in white, black, and coloured crayons on the blackboard and on large sheets of paper.

Design and lettering: The principles of rhythm, balance, and harmony in decorative design; the use of natural and geometric forms, and of historic ornament in design; the making of surface designs to be applied to useful purposes such as borders, festival cards, menus, programme covers, book covers, posters, etc. Lettering with the freehand and mechanical aids; the principles of good spacing; the formation of Gothic and of standard Roman capitals; modifications for decorative purposes; the carrying out of designs in neutral values and in colour.

Art appreciation: How to study pictures, sculpture, and architecture; the special study of a few of the masterpieces of each.

B. Methods of teaching Art in the Public Schools.

C. Methods of teaching Art in the High Schools.

Books of Reference:

\* *Ontario Teachers' Manuals: Art.*

Crane, *Line and Form.*

Cross, *Light and Shade.*

Dow, *Composition.*

Branch, *Design.*

Cross, *Colour.*

Norton, *Freehand Perspective and Drawing.*

Whitney, *Blackboard Drawing.*

Lethaby, *Architecture.*

Sturgis, *The Appreciation of Pictures, Sculpture, and Architecture.*

Caffin, *Guide to Pictures.*

## PHYSICAL CULTURE AND HYGIENE

34. (1) All candidates for Interim First Class Grade B certificates will take Hygiene and Course I in the Physical Culture. All candidates for Interim Ordinary High School certificates will take Hygiene and Course II. Course II is also the course prescribed for the Elementary certificate in Physical Culture.

(2) The object of the course in Hygiene is to train the student in the knowledge requisite for the maintenance of the health of both himself and his pupils, and to qualify him for supervising the sanitary conditions of the school and its surroundings.

(3) The object of the course in Physical Culture is to prepare the student to provide properly for the physical training of his pupils. With hygiene (school and personal) as a basis, it prescribes and directs rational forms of exercises for the attainment and maintenance of health, the development of the symmetrical body, and the formation of habits of grace and ease in muscular movements.

(4) The following are the main topics of the course in Hygiene:

School Hygiene; school sanitation; common facts of bacteriology; general instructions for the detection of communicable diseases; modes of preventing the spread of these diseases; sanitary legislation; duties of teachers.

Personal Hygiene (with the necessary minimum of anatomy and physiology); framework of the body; spinal curvature, its causes; digestive system; foods; care of teeth; saliva. Physiology of respiration and circulation. Skin and other depuratory organs, hair, nails, bathing, clothing, etc. Muscles; the relation of mind to body; mental exercise; study; rules regarding mental work; irregular and over-work; mental strain and worry. Effects of alcohol, tobacco, etc., on organs and functions.

Myopia and presbyopia; affections of eyes due to improper school accommodations; tests for defective vision; ear, nose, and throat troubles as a cause of dullness in pupils; tests for defective hearing and breathing.

Treatment of emergencies; first aid in fractures, dislocations, and sprains, drowning, suffocation and fainting, cuts, and hemorrhage, and other accidents or emergencies.

Books of Reference:

Allen, *Civics and Health*.

Gulick, *Hygiene Series*.

Martin, *The Human Body*.

O'Shea and Kellogg, *Hygiene Series*.

(5) The following are the main topics of course I in Physical Culture:

Exercises for Heart and Lungs: Deep breathing, running, hopping, rapid walking, "chopping" (with wands, dumb-bells or freehand).

Exercises for the Digestive Organs: Circlings, lateral movements of trunk, "diving", etc. (with wands, dumb-bells, or freehand).

Muscular development: Action of the muscles. Exercises for the systematic development, with or without apparatus, of neck, trunk, arms, and legs.

Corrective exercises: Exercises for overcoming certain deformities or lack of symmetry.

Balance exercises: Exercises for promoting a graceful and well-balanced carriage and co-ordination of muscles.

Tactics: Facings and stepplings; marching in various formations of rank, file, column, etc.; turning, marching, stepping, forming fours, etc., the formation of classes in position for physical drill; fancy steps, running.

Mutual instruction.

Course I includes also the Course for the Strathcona Grade B certificate.

Books of Reference:

The Syllabus of Physical Exercises for Schools.

Barton, *Physical Training*.

Bancroft, *Games for the Playground, Home, School, and Gymnasium*.

Kimmons, *Guild of Play Book, Parts I, II, III*.

Mari Hofer, *Popular Folk Games and Dances*.

Burchenal, *Dances of the People*.

Burchenal, *Folk Dances and Singing Games*.

(6) The following are the main topics of Course II in Physical Culture:

Principles: (for Men and Women).

Anatomy: Bones, composition, classification; bones of upper extremity; bones of the vertebral column; bones of the head; bones of the abdomen and thorax; bones of the lower extremity. Joints: classification and description of movable joints; importance of joints. Muscles; varieties; origin, insertion, and action. Digestive system, stomach, liver, etc.; circulatory system, heart, arteries, veins, etc.; respiratory system; nervous system.

Physiology: Oxidation and waste, metabolism; blood, composition, quality, the heart beat; respiration, mechanism, changes in the lungs, in the tissues; nervous mechanism of respiration; physiology of muscle. Digestion; digestive juices; function of saliva; gastric juice, pancreatic juice, and bile; succus entericus; changes in the food in the alimentary canal; lymph, movements; absorption. Nutrition; comparison of income and output of material, animal heat; diet.

First aid to the injured; shock, wounds, bleeding, burns, exposure to cold, frostbite, fractures, sprains and dislocations, restoration of the apparently drowned, choking, foreign bodies in eye or ear, unconsciousness, fainting, apoplexy, heat stroke, poisons, bandaging.

Practice: (For men only).

Calisthenics. Dumb-bells—Roberts, Barton, combinations; wands, elementary, Barton, miscellaneous; clubs, class club-swinging.

Elementary exercises on apparatus. Horse; vaults, flank, front, rear, screw, squat, straddle, wolf; mats, jumps and hops, jumps and hops with turns, underswings, underswings with turns, buck, vaults, same as on horse and vaulting bar.

Indoor games. Course to enable teachers to coach and referee the following games: basket-ball, indoor basket-ball, volley-ball.

Outdoor Athletics: Field and track sports.—Course to enable teachers to coach athletics and to direct athletic meets; starting, sprinting, running; broad jump, high jump, shot put, hurdles.

Mutual Instruction.

Practice: (For Women Only).



Squad drill, marching tactics, wheeling, turnings.

Free hand exercises, including Strathcona Trust exercises; dumb-bell drills, elementary, advanced; wand drills, Barton, Anderson's twist drill; clubs, classified exercises.

Elementary exercises on the following apparatus; horse, mats, vaulting bar, buck, rings, Swedish stall bars, suspended ladder.

Indoor athletic sports: Running races, gymnasium games, including basketball; school-room and playground games.

Dancing; technique of dancing; simplified athletic dances; folk dances and singing games; Old English country dances.

Swimming; elementary.

Mutual Instruction.

Course II includes also the course for the Strathcona Grade B certificate.

#### Books of Reference:

- \* *The Syllabus of Physical Exercises for Schools (Strathcona Trust.)*

Barton, *Physical Training.*

Bancroft, *Games for the Playground, Home, School, and Gymnasium.*

Kimmons, *Guild of Play Book, Parts I, II, III.*

Mari Hofer, *Popular Folk Games and Dances.*

Burchenal, *Dances of the People.*

Burchenal, *Folk Dances and Singing Games.*

## DEGREES IN PEDAGOGY.

Recent Statutes have made important changes in the former regulations as to the degrees in Pedagogy. The fee schedules have been readjusted; the courses themselves have been reorganized in sympathy with later movements in education, while they have also become more professional in purpose; and examinations have been divided into subjects to be taken in the same or different years; and, through the staff of the Faculty of Education, the University will give assistance in the form of suggestions as to reading to all candidates for the degrees. It may be added that the Department of Education of Ontario exempts the holder of the Degree of B. Paed, or D. Paed, from one or two (as the case may be) of the seven years of experience required of candidates for Inspectors' certificates.

By a joint arrangement with the Faculty of Education of the University of Toronto Summer Course of instruction for candidates for degrees in Pedagogy are offered as follows:

In the summer of 1917 in the Science of Education and in the History of Education at Queen's University.

In the summer of 1918 in Educational Psychology and in School Administration at the University of Toronto.

Candidates who have enrolled under the old course may transfer to the new courses outlined below with *pro tanto* standing for the examinations in which they have already passed.

### DEGREE OF BACHELOR OF PEDAGOGY

The degree of Bachelor of Pedagogy (B.Paed) is granted to students in the Faculty of Education under the following conditions:—

1. The candidate shall hold (a) a degree in Arts, not being an honorary degree, from a university in the British Dominions; and (b) a first class or High School Assistant's certificate granted by the Department of Education of Ontario, or a certificate of equal value.

2. The candidate shall pass examinations in the Science of Education, in Educational Psychology, in the History of Education and Educational Systems, and in Educational Administration and Organization.

3. Before he completes the examinations for the degree the candidate shall submit certificates of at least two years' successful experience in teaching.

4. The candidate shall register in the Faculty of Education at least six months before he presents himself for examination. The fee for registration is \$10.

5. The examination shall be held in December at Queen's University or in any other locality in the province chosen by the candidate and approved by the Senate, provided the candidates thereat defray the cost of the local examination. The candidate shall send notice not later than the 1st of November of his intention to take the examination and of the locality he has chosen for such examination.

6. The fee is \$10 for the full examination or \$3 for each subject if taken separately. The fee for the degree is \$20. All fees shall be paid to the Bursar with the application for registration or examination as the case may be.

7. The work in each subject may be taken and will be examined on separately. The standard for a Pass degree shall be 60 per cent. of the marks assigned to each subject. The candidate who obtains 60 per cent. of the marks of each subject and 66 per cent. of the aggregate of marks shall be awarded a degree with Second Class Honours. The candidate who obtains 60 per cent. of the marks of each subject and 75 per cent. of the aggregate of marks shall be awarded a degree with First Class Honours.

#### 8. Subjects of Examination:

(The bibliographies given below are not obligatory; they are suggestive only).

(i) The Science of Education, including a study of the philosophical, ethical, and sociological bases of education. (Two papers.)

References:

- Alexander, *A Short History of Philosophy*.  
Bagley, *The Educative Process*.  
Dewey, *The School and Society*. *The School and the Child*.  
MacCunn, *The Making of Character*.  
Mill, *Utilitarianism*.  
Ruediger, *Principles of Education*.  
Spencer, *Education*.  
Watson, *Outlines of Philosophy*.

(ii) Educational Psychology. (Two papers.)

References:

- Hall, *Aspects of Child Life and Education*.  
James, *Psychology* (Briefer Course).  
McDougall, *Physiological Psychology*.  
Parker, *Methods of Teaching in High Schools*.  
Pillsbury, *Essentials of Psychology*.  
Sandiford, *Mental and Physical Life of School Children*.  
Titchener, *Outlines of Psychology*.

(iii) The History of Education and Educational Systems. (Two papers.)

References:

- Davidson, *Rousseau and Education according to Nature*.  
De Garmo, *Herbart and the Herbartians*.  
Fletcher and Welton, *Froebel's Chief Educational Writings*.  
Freeman, *Schools of Hellas*.  
Graves, *History of Education* (3 vols.).  
Green, *Pestalozzi's Educational Writings*.  
Monroe, *Textbook in the History of Education*.  
Monroe, *Comenius*.  
Monroe, *Source Book of the History of Education*.  
Parker, *History of Modern Elementary Education*.  
Wilkins, *Roman Education*.  
Woodward, *Vittorino da Feltre*.

(iv) Educational Administration and Organization, including an examination of the outlines of the present-day educational systems of Germany, France, England, and the United States. (Two papers.)



References:

- Balfour, *Educational Systems of Great Britain and Ireland.*  
Bolton, *The Secondary School System of Germany.*  
Brown, *American High Schools.*  
Butler, *Education in the United States.*  
Dutton & Snedden, *Administration of Education in the United States.*  
Eliot, *Educational Administration.*  
Farrington, *The Public Primary School System of France.*  
Farrington, *French Secondary Schools.*  
Greenough, *The Evolution of the Elementary Schools of Great Britain.*  
Hollister, *High School Administration.*  
Hughes, *The Making of Citizens.*  
Monroe, *Cyclopaedia of Education.*  
Seelev, *The Common School System of Germany.*

DEGREE OF DOCTOR OF PEDAGOGY.

The degree of Doctor of Pedagogy (D.Paed.) is granted to students in the Faculty of Education under the following conditions:

1. The candidate shall hold a degree in Arts, not being an honorary degree, from a University in the British Dominions and a first class or High School assistant's certificate or its equivalent.
2. Before he completes the examinations for the degree, he shall submit evidence of at least three years' successful experience as teacher or inspector.
3. The candidate shall register in the Faculty of Education at least six months before he presents himself for examination. The fee for registration is \$10.
4. After the year 1918 no candidate for the degree of D.Paed. will be admitted to the examinations in any subject of the course who has not attended a Summer Course (or its equivalent) in that subject.
5. The candidate shall pass examinations in the Science of Education, Educational Psychology, the History of Education, and Educational Administration and Organization. He shall also submit on or before November 1st, a thesis on some educational

topic selected with the approval of the Faculty of Education. In valuing this thesis literary excellence, as well as the discussion of the subject, will be taken into account. After the examiners have reported in favour of the candidate's answer papers and thesis, and before the degree of D.Paed. is conferred, the candidate shall furnish the Registrar of the University with one hundred printed copies of the thesis.

6. The examination, which may be taken as a whole or separately in subjects, shall be held at such times and under such conditions as to date of application, place of examination, division of the examination, etc., as obtain with the Bachelor's degree.

7. Candidates who possess partial standing in the D.Paed. courses may, with the consent of the Council of the Faculty of Education, have that standing applied in qualification for the B.Paed. degree.

8. The fee for the whole examination is \$10, and for each subject, when taken separately, \$3. The fee for the degree is \$25. All fees shall be paid to the Registrar with the applications.

#### 9. Subjects of Examination.

(The bibliographies given below are not obligatory; they are suggestive only.)

(i) The Science of Education, including a study of the philosophical, ethical and sociological bases of education. (Two papers.)

#### References:

- Adams, *The Evolution of Educational Theory.*
- Bosanquet, *Education of the Young in Plato's Republic.*
- Bosanquet, *The Philosophic Theory of the State.*
- Cooley, *Human Nature and the Social Order.*
- Croce, *Philosophy of the Practical* (trans. Ainslee).
- Dewey, *Schools of To-morrow.*
- Hayes, *Introduction to Sociology.*
- Hobhouse, *Morals in Evolution.*
- Wallas, *The Great Society, Human Nature in Politics.*

(ii) Educational Psychology. (Two papers.)

References:

- Hall, *Adolescence*, 2 vols.  
Hobhouse, *Mind in Evolution*.  
Huey, *Psychology and Pedagogy of Reading*.  
James, *Principles of Psychology*, 2 vols.  
Judd, *Psychology of High School Subjects*.  
Ladd & Woodworth, *Elements of Physiological Psychology*.  
MacDougall, *Social Psychology*.  
Rusk, *Introduction to Experimental Education*.  
Thorndike, *Educational Psychology*, 3 vols.

(iii) The History of Education and Educational Systems from 1800 to the present day, with special reference to Germany, France, Great Britain, the United States, and Ontario. (Two papers.)

References:

- Balfour, *The Educational Systems of Great Britain and Ireland*.  
Birchenough, *History of Elementary Education in England and Wales*.  
Brown, *The Making of our Middle Schools*.  
Coleman, *Public Education in Upper Canada*.  
Dexter, *History of Education in the United States*.  
Farrington, *The Public Primary School System of France*.  
Farrington, *French Secondary Schools*.  
Findlay, *Arnold at Rugby*.  
Fletcher & Welton, *Froebel's Chief Educational Writings*.  
Graves, *History of Education* (Vol. 3).  
Green *Pestalozzi's Educational Writings*.  
Green, *Life and Work of Pestalozzi*.  
Herbart, *Outlines of Education Doctrine* (Lange and De Garmo).  
Monroe, *Textbook on the History of Education*.  
Parker, *History of Modern Elementary Education*.  
Paulsen, *German Education Past and Present*.  
Putman, *Egerton Ryerson and Education in Upper Canada*.  
Russell, *German Higher Schools*.  
Spencer, *Education*.

Candidates are also advised to consult, if accessible, the following:—

The Special Reports of the English Department of Education.

The Reports of the United States Commissioner of Education.

The Reports of the Minister of Education for Ontario.

Monroe's Cyclopaedia of Education; Hodgins' Documentary History of Education in Upper Canada; Canada and its Provinces, vol. xviii.

(iv) Educational Administration and Organization in Germany, France, England, and the United States, and with special reference to the administration and organization of education in Ontario. (Two papers.)

References:

Brown, *The Training of Teachers for Secondary Schools.*

Burstall and Douglas, *Public Schools for Girls.*

Farrington, *The Public Primary School System of France.*

Farrington, *French Secondary Schools.*

Johnson, *High School Education.*

Kandel, *Elementary Education in England.*

Kandel, *The Training of Elementary Teachers in Germany.*

Monroe, *Secondary Education.*

Norwood and Hope, *Higher Education of Boys in England.*

Ontario, *The Acts Regulations, Instructions of the Department of Education.*

Paulsen, *German Education Past and Present.*

Russell, *German Higher Schools.*

Sachs, *The American Secondary School and Some of its Problems.*

Sandiford, *The Training of Teachers in England and Wales.*

Seath, *Education for Industrial Purposes.*

Strayer and Thorndike, *Educational Administration, Quantitative Studies.*

Candidates are advised to consult, if accessible, the Special Reports of the Board of Education for England; the Reports of the United States Commissioner of Education, the Reports of the Minister of Education for Ontario, and Monroe's Cyclopaedia of Education.



## LIBRARY FACILITIES FOR GRADUATE STUDENTS

Graduate students registered for degrees in Pedagogy may borrow from the University Library any books required in their work with the exception of dictionaries, encyclopedias, and other volumes not ordinarily loaned.

Graduate students, desiring to obtain books from the Library are required to make with the Librarian a deposit of \$2 for one book, \$4 for two books, and \$5 for three. Books may be exchanged as often as the borrower wishes; and when all are returned, the deposit, less the amount spent for postage, will be repaid on request. No fee is charged for the use of the Library.

All communications concerning books and deposits must be addressed to The Librarian, Queen's University, Kingston, Ontario.

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*Note:* By a joint arrangement with the Faculty of Education of the University of Toronto, summer courses for candidates for degrees in Pedagogy are offered as follows:—

In the summer of 1918, in School Administration and in Educational Psychology at the University of Toronto.

In the summer of 1919 in the Science of Education and in the History of Education at Queen's University.

The Faculty of Education also offers for extra-mural candidates for First Class and High School Assistants' certificates courses in the subjects for these examinations. For further information apply to The Secretary, The Faculty of Education, Queen's University.

The giving of these courses is conditional upon a sufficient number of applications being received.

REGISTER OF STUDENTS, FACULTY OF EDUCATION, 1916-17.

*ADVANCED COURSE.*

McDonnell, Margaret (Sister St. Clare) . . . . . Kingston, Ont.

*GENERAL COURSE.*

Abrams, Morley . . . . . Uxbridge, Ont.  
Ball, W. M. . . . . Uxbridge, Ont.  
Bracken, Evelyn G. . . . . Niagara Falls, Ont.  
Burton, Violet . . . . . Perth, Ont.  
Donnelley, Mina . . . . . Athens, Ont.  
Durkin, Mary (Sister M. Ambrosia) . . . . . St. Thomas, Ont.  
Ellis, Neta M. . . . . Wooler, Ont.  
Fenton, Hazel S. . . . . Brockville, Ont.  
Findlay, Susie M. . . . . Pembroke, Ont.  
Fleming, Lulu . . . . . Kingston, Ont.  
Gardiner, Aleda . . . . . Kingston, Ont.  
Garry, G. Aileen . . . . . Cornwall, Ont.  
Gillies, Robert . . . . . Port Hope, Ont.  
Greenan, Mary H. (Sister Mary Helen) . . . . . Douglas, Ont.  
Hamm, Mary . . . . . Bath, Ont.  
Holly, Anna M. . . . . Brudenell, Ont.  
Houze, Margaret . . . . . Lombardy, Ont.  
Kelly, F. M. . . . . Pembroke, Ont.  
Lees, Margaret A. . . . . Dutton, Ont.  
Leggett, Hilda . . . . . Newboro, Ont.  
Madigan, Ellen I. . . . . Deseronto, Ont.  
Manley, T. E. . . . . Cobden, Ont.  
Mielhausen, A. J. . . . . Walkerton, Ont.  
Moore, Marion A. . . . . Campbellford, Ont.  
Mackay, Wm. . . . . Hensall, Ont.  
Mackintosh, Agnes W. . . . . Madoc, Ont.  
MacPhail, Mary C. . . . . Russell, Ont.  
Macpherson, M. Kate . . . . . Prescott, Ont.  
McCann, W. E. . . . . Aylwin P.O., Que.  
McDougall, Mary V. . . . . Bolsover, Ont.  
McIlraith, Margaret I. . . . . Applehill, Ont.  
McIntosh, Catherine (Sister St. Andrew) . . . . . Westport, Ont.  
McIntyre, Mary L. . . . . Dixon Corner, Ont.  
McKillop, A. F. . . . . Dutton, Ont.  
McLachlan, Christena . . . . . White Lake, Ont.

|   |                    |
|---|--------------------|
| Neale, W. J. ....                           | Ottawa, Ont.       |
| Nesbitt, Lela T. ....                       | Aultsville, Ont.   |
| Percival, M. Lois ....                      | Kemptville, Ont.   |
| Reed, Agnes (Sister M. of St. Hilda) ....   | Alexandria, Ont.   |
| Root, J. M. ....                            | Napanee, Ont.      |
| Rose, Kathleen M. ....                      | Galt, Ont.         |
| Rosenfield, Rose ....                       | Cornwall, Ont.     |
| Ryan, Winnifred (Sister Mary Margaret) .... | Douglas, Ont.      |
| Sillers, Annie M. ....                      | Walkerton, Ont.    |
| Sliter, M. Elizabeth ....                   | Brockville, Ont.   |
| Stewart, E. Grace ....                      | Campbellford, Ont. |
| Stillwell, Bertha E. R. ....                | Meaford, Ont.      |
| Theriaut, Theresa E. ....                   | Kingston, Ont.     |
| Tobin, Mary (Sister M. Isabel) ....         | London, Ont.       |
| Waddell, T. K. ....                         | Edwards, Ont.      |
| Waterman, Isobel M. ....                    | Carp, Ont.         |
| Werte, Mary M. ....                         | Iroquois, Ont.     |
| Whalley, Muriel E. ....                     | Arnprior, Ont.     |
| White, Lloyd ....                           | Beachburg, Ont.    |

#### *COURSES FOR SPECIALISTS' CERTIFICATES ONLY.*

|                        |                     |
|------------------------|---------------------|
| Butcher, C. W. ....    | Nanticoke, Ont.     |
| Erwin, W. M. ....      | Georgetown, Ont.    |
| Howson, Alexandra .... | Niagara Falls, Ont. |
| MacLeod, Mary A. ....  | Goderich, Ont.      |
| Powell, Mabel ....     | Prescott, Ont.      |
| Scott, A. G. ....      | Orangeville, Ont.   |
| Shaver, C. A. ....     | Kingston, Ont.      |
| Tobin, Lilly S. ....   | Uxbridge, Ont.      |
| Urlin, W. R. ....      | Carlyle, Sask.      |

#### *COURSE FOR INSPECTOR'S CERTIFICATE.*

|                     |                  |
|---------------------|------------------|
| Cameron, J. G. .... | Port Elgin, Ont. |
| Evans, J. J. ....   | Toronto, Ont.    |

#### *COURSES FOR DEGREES IN PEDAGOGY.*

|                          |                  |
|--------------------------|------------------|
| Arnold, Hubert Geo. .... | Toronto, Ont.    |
| Bingay, Jas. ....        | Glace Bay, N. S. |
| Colquhoun, A. D. ....    | Ottawa, Ont.     |
| Cram, W. S. ....         | Yorkton, Sask.   |
| Clarke, T. E. ....       | Ottawa, Ont.     |
| McLean, Wm. A. ....      | Kingston, Ont.   |
| McMaster, Maud H. ....   | Windsor, Ont.    |

|                           |                          |
|---------------------------|--------------------------|
| Copeland, C. B. ....      | London, Ont.             |
| Easson, McGregor .....    | Ottawa, Ont.             |
| Edwards, C. H. ....       | Ottawa, Ont.             |
| Ettinger, J. G. ....      | Kingston, Ont.           |
| Ferguson, A. W. ....      | Walkerton, Ont.          |
| Finlayson, D. K. ....     | Grand River, N.S.        |
| Foley, R. S. ....         | Toronto, Ont.            |
| Froats, Jas. ....         | Finch, Ont.              |
| Greer, V. K. ....         | Stratford, Ont.          |
| Harrison, F. W. ....      | Prince Albert, Sask.     |
| Harvey, J. F. ....        | Peterborough, Ont.       |
| Hicks, T. J. ....         | Caledonia, Ont.          |
| Honey, H. P. ....         | Westmount, Que.          |
| Huff, J. S. ....          | Regina, Sask.            |
| Huff, Samuel .....        | Meaford, Ont.            |
| Hutchinson, J. M. ....    | Calgary, Alberta         |
| Jones, F. A. ....         | Ottawa, Ont.             |
| Kestenbaum, S. W. ....    | Elkhorn, Manitoba        |
| Keyes, S. J. ....         | Peterborough, Ont.       |
| Lamb, W. J. ....          | Walkerton, Ont.          |
| Lindsay, W. B. ....       | Moose Jaw, Sask.         |
| Lynd, L. E. ....          | Taber, Alberta           |
| Miller, G. A. ....        | Ottawa, Ont.             |
| Mowat, A. ....            | Peterborough, Ont.       |
| Munro, P. F. ....         | Toronto, Ont.            |
| MacDonald, Neil S. ....   | Toronto, Ont.            |
| MacMillan, Geo. ....      | Ottawa, Ont.             |
| McCutcheon, J. M. ....    | Toronto, Ont.            |
| McNab, G. G. ....         | Renfrew, Ont.            |
| Niddrie, John G. ....     | Edmonton South, Alberta. |
| Reaman, G. E. ....        | Woodstock, Ont.          |
| Shales, Wm. E. ....       | Ingersoll, Ont.          |
| Shaver, C. A. ....        | Owen Sound, Ont.         |
| Shurtleff, W. M. ....     | Kingston, Ont.           |
| Smith, F. P. ....         | Brockville, Ont.         |
| Spence, J. C. ....        | Ottawa, Ont.             |
| Stevenson, Andrew .....   | London, Ont.             |
| Stickle, W. A. ....       | Red Deer, Alberta        |
| Stillwell, George B. .... | Moose Jaw, Sask.         |
| Stubbs, S. J. ....        | Peterborough, Ont.       |
| Tuck, John R. ....        | Camrose, Alberta         |
| Voaden, John .....        | Hamilton, Ont.           |
| Walker, A. J. ....        | London, Ont.             |
| Weir, George M. ....      | Saskatoon, Sask.         |
| Wilson, J. J. ....        | Belleville, Ont.         |



*SUMMER SESSION, 1917.*

|                          |                    |
|--------------------------|--------------------|
| Althouse, J. G. ....     | Galt, Ont.         |
| Anderson, J. T. M. ....  | Yorkton, Sask.     |
| Boyd, Annie A. ....      | Morrisburg, Ont.   |
| Cameron, J. G. ....      | Kingston, Ont.     |
| Chisholm, W. I. ....     | Peterborough, Ont. |
| Colquhoun, A. D. ....    | Ottawa, Ont.       |
| Earls, Adeline ....      | Richmond, Que.     |
| Edwards, W. J. ....      | Cookshire, Que.    |
| Gill W. H. ....          | Sherbrooke, Que.   |
| Goldstick, I. ....       | Toronto, Ont.      |
| Greer, V. K. ....        | Stratford, Ont.    |
| Hofferd, G. W. ....      | London, Ont.       |
| Kerr, Martin ....        | Hamilton, Ont.     |
| Latour, C. A. ....       | Ottawa, Ont.       |
| Martyn, H. G. ....       | Stratford, Ont.    |
| MacMillan, J. B. ....    | Huntingdon, Que.   |
| Miller, G. A. ....       | Ottawa, Ont.       |
| Revelle, Mrs. S. E. .... | Kingston, Ont.     |
| Saunders, W. J. ....     | Kingston, Ont.     |
| Thompson, P. M. ....     | Windsor, Ont.      |
| Weir, G. M. ....         | Saskatoon, Sask.   |











